

1.8 WARRANTY

A. Manufacturer's Warranty: Submit, for Owner's acceptance, manufacturer's standard warranty, document executed by authorized company official.

Manufacturer's warranty is in addition to, and not a limitation of, other rights Owner may have under contract documents.

1. Warranty Period: Ten (10) year limited warranty commencing on Date of Substantial Completion.

PART 2 - PRODUCTS

2.1 INTUMESCENT PAINT

A. Manufacturer: Equal to FIREFREE Coatings, Inc.

1. Contact: 580 Irwin Street, Suite 1, San Rafael, CA 94901; toll free (888) 990-3388, main (415) 459-6488; fax : (415) 459-6055; E-mail: @firefree ; website: .firefree .

B. Intumescent paint:

1. Equal to Firefree 88@:

a. Material: Water based latex.

b. Solids: 68%.

c. Color: Custom Tinted: Match Sherwin Williams No. SW 7018 Dovetail.

d. Sheen: Flat.

e. Volatile Organic Compounds (VOCs): 33 grams/liter.

f. Surface Burning Characteristics: Class A (ASTM E-84).

g. Quality Control Requirements: Manufactured under FM Factory Follow-up Program and Underwriters Laboratory. Each container or package shall bear FM Approved label.

PART 3 - EXECUTION

3.1 MANUFACTURER'S INSTRUCTIONS

A. Comply with the instructions and recommendations of the intumescent paint manufacturer.

B. Work includes complete preparation and finishing of all surfaces described in articles below.

3.2 EXAMINATION

A. Site Verification of Conditions:

1. Inspect all surfaces scheduled to receive intumescent paint to ensure compliance with manufacturer's requirements for a successful application.

2. Do not proceed with application until unsatisfactory substrate conditions have been corrected.

3.3 PREPARATION

A. Protection:

1. Protect adjacent surfaces against paint drops or spills. Repair damage resulting from inadequate protection.
2. Protect all surfaces, equipment and fixtures from damage resulting from use of staging. Repair damage resulting from inadequate protection.

B. Surface Preparation:

1. All surfaces to be coated must be clean, cured, firm, dry and free of dust, dirt, oil, wax, grease, mildew, loose flaking paint or other foreign matter that would impair bond of the intumescent coating.

3.4 APPLICATION

- A. Protect work from moisture during application and for a period of at least 24 hours after application.
- B. Mix product according to manufacturer's recommendations. Do not thin or strain.
- C. Apply using brush or roller.
- D. Apply at a rate of approximately 10 mils dry per 114 sq.ft./gal (14 mils wet = 10 mils dry). Apply to thickness required to provide the equivalence of one hour rating.
- E. Enamel Finish Coat: Apply 1 coat of a latex primer over FF88® before applying a latex enamel finish coat.
- F. Apply additional finish coats only after previously applied coats have completely cured and dried.

3.5 FIELD QUALITY CONTROL

- A. Inspection:
 1. The independent testing agency will ensure that preparation of substrate is in accordance with manufacturer's recommendations.
 2. The testing agency will randomly obtain and test samples during application to verify that wet film thickness of the intumescent coating complies with requirements of this section.
 3. Work not in compliance will be rejected and shall immediately be brought into compliance by the applicator.

3.6 PROTECTION

- A. Protect work from damage during subsequent construction.

- - - E N D - - -

SECTION 10 11 13
MARKERBOARDS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies markerboards and related items.
- B. Boards may be either factory or field assembled.

1.2 QUALITY ASSURANCE

- A. Boards shall be the products of one manufacturer.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Shop Drawings: Identifying all parts by name and material and showing design, construction, installation, anchorage and relation to adjacent construction.
- C. Manufacturer's Literature and Data:
 - 1. Markerboard
- D. Samples:
 - 1. Markerboard writing surface, 300 by 300 mm (six by six inches), each color, mounted on backing.
 - 2. Integrally colored anodized aluminum, 300 mm (six inch) length.
 - 3. Each accessory (after approval, may be used in the work).

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American National Standards (ANSI):
 - Z97.1-09.....Safety Glazing Materials Used in Buildings -
Safety Performance Specifications and Methods of
Test
- C. American Society for Testing and Materials (ASTM):
 - B221/B221M-08.....Aluminum and Aluminum Alloy Extruded Bars, Rods,
Wire, Shapes and Tubes
 - C1036-06.....Flat Glass
 - C1048-04.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated
and Uncoated Glass
 - F104-03(R2009).....Nonmetallic Gasket Materials
- D. Composite Panel Association (CPA):
 - A208.1-09.....Particleboard
 - A135.4-04.....Basic Hardboard
- E. Porcelain Enamel Institute (PEI)

1001-11.....Architectural Porcelain Enamel

PART 2 - PRODUCTS

2.1 MARKERBOARD

- A. Markerboards shall consist of a writing surface, snap on aluminum frame, marker trough, mullions, display rail and accessories, grounds and other items specified and shown.

2.2 FABRICATION

A. Materials:

1. Aluminum, extruded: ASTM B221.
2. Backing: Hardboard, AHBA A135.4 or particleboard, CPA A208.1.

B. Components:

1. Writing Surface: Factory assembly consisting of face sheet of 24 gauge sheet steel with porcelain enamel board texture finish conforming to PEI 1001, laminated to a hardboard or particleboard backing, 9 mm to 13 mm (3/8 to 1/2-inch) thick, and a 0.13 mm (0.005-inch) thick aluminum foil back sheet laminated to back-face.
2. Frames (Trim): Extruded aluminum, 1.5 mm (0.060-inch) thick, snap-on type, approximate face width 44 mm (1-3/4 inch), depth and configuration as required to return to wall and engage clips.
3. Trough: Extruded aluminum, 2.34 mm (0.092-inch) thick, not less than 75 mm (3-inch) projection from writing surface with grooved top surface, closed ends and return to wall surface at underside. Design to be snap-on type with concealed fasteners.
4. Accessories: Fabricate from aluminum with holders from spring steel. Design to suit display rail. Furnish accessories as follows: Furnish one (1) paper Holder per two (2) lineal feet of rail.
6. Grounds: Continuous zinc-coated (galvanized) steel or extruded aluminum members designed to support the board writing surface and clips for snap-on frames, map rail and marker tray.
7. Clips: Manufacturer's standard as required to support frame, mullions, display rail, and trough.

C. Boards 3660 mm (12 feet) or less in length shall be in one piece.

D. Finish exposed aluminum surfaces as follows:

1. AA 45 chemically etched medium matte, with clear anodic coating Class II Architectural, 0.4 mils thick (AA-M12C22A32).
2. AA 45 chemically etched medium matte, with integrally colored anodic coating, Class II Architectural, 0.4 mils thick (AA-M12C22A32, of color to match approved sample).

PART 3 - EXECUTION**3.1 INSTALLATION, GENERAL**

- A. Install units in accordance with the manufacturer's installation instructions, use concealed fasteners.
- B. Inspect surfaces and related construction to receive units. Partitions shall have reinforcing to receive fasteners. Verify type and placement of reinforcement.
- C. Do not proceed with the installation until reinforcement is in place and surfaces are flat.
- D. Assemble units as specified by the manufacturer.

3.2 INSTALLATION OF MARKERBOARD

- A. Mount board with adhesive and blocking pads spaced 16 inches on center each way.
- B. Grounds designed to receive clips for snap-on trim shall be continuous and be secured 300 mm (12 inches) on center. Space clips 300 mm (12 inches) on center.
- C. Miter trim at corners, conceal fasteners. Modify trim as required to conform to surrounding construction details.

- - - E N D - - -

SECTION 10 11 23
TACKBOARDS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies tackboards (bulletin boards) and related items.
- B. Boards may be either factory or field assembled.

1.2 QUALITY ASSURANCE

- A. Boards shall be the products of one manufacturer.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Shop Drawings: Identifying all parts by name and material and showing design, construction, installation, anchorage and relation to adjacent construction.
- C. Manufacturer's Literature and Data:
 - 1. Tackboard
- D. Samples:
 - 1. Tackboard, 300 by 300 mm (six by six inches), each color, mounted on backing.
 - 2. Integrally colored anodized aluminum, 300 mm (six inch) length.
 - 3. Cork filled map rail, 300 mm (six inch) length.

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. National Association of Architectural Metal Manufacturers (NAAMM):
 - AMP 500 Series.....Metal Finishes Manual
 - AMP 501.....Finishes for Aluminum
- C. American National Standards Institute(ANSI):
 - Z97.1-09.....Safety Glazing Materials Used in Buildings -
Safety Performance Specifications and Methods of
Test
- D. American Society for Testing and Materials (ASTM):
 - B221/B221M-08.....Aluminum and Aluminum Alloy Extruded Bars, Rods,
Wire, Shapes and Tubes
 - C1036-06.....Flat Glass
 - C1048-04.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated
and Uncoated Glass
 - F104-03(R2009).....Nonmetallic Gasket Materials
- E. Composite Panel Association (CPA):

A208.1-09.....Particleboard

A135.4-04.....Basic Hardboard

PART 2 - PRODUCTS

2.1 TACKBOARD

- A. Tackboard shall consist of a tackboard, snap on aluminum frame, grounds and other items specified and shown.

2.2 FABRICATION

A. Materials:

1. Aluminum, extruded: ASTM B221.
2. Cork: ASTM F104, Type II, mildew resistant, Class 2.
3. Backing: Hardboard, AHBA A135.4 or particleboard, CPA A208.1.

B. Components:

1. Tackboard: Cork face, 6 mm (1/4-inch) thick factory laminated to a hardboard or particleboard backing, color: Natural Textured Cork.
2. Frames (Trim): Extruded aluminum, 1.5 mm (0.060-inch) thick, snap-on type, approximate face width 44 mm (1-3/4 inch), depth and configuration as required to return to wall and engage clips.
3. Grounds: Continuous zinc-coated (galvanized) steel or extruded aluminum members designed to support the tackboard and clips for snap-on frames, and map rail
4. Clips: Manufacturer's standard as required to support frame, mullions, and display rail,

- C. Tackboards 3660 mm (12 feet) or less in length shall be in one piece.

D. Finish exposed aluminum surfaces as follows:

1. AA 45 chemically etched medium matte, with clear anodic coating Class II Architectural, 0.4 mils thick (AA-M12C22A32).
2. AA 45 chemically etched medium matte, with integrally colored anodic coating, Class II Architectural, 0.4 mils thick (AA-M12C22A32, of color to match approved sample).

PART 3 - EXECUTION

3.1 INSTALLATION, GENERAL

- A. Install units in accordance with the manufacturer's installation instructions, use concealed fasteners.
- B. Inspect surfaces and related construction to receive units. Partitions shall have reinforcing to receive fasteners. Verify type and placement of reinforcement.
- C. Do not proceed with the installation until reinforcement is in place and surfaces are flat.
- D. Assemble units as specified by the manufacturer.

3.2 INSTALLATION OF TACKBOARD:

- A. Mount tackboards with adhesive and blocking pads spaced 16 inches on center each way.
- B. Grounds designed to receive clips for snap-on trim shall be continuous and be secured 300 mm (12 inches) on center. Space clips 300 mm (12 inches) on center.
- C. Miter trim at corners, conceal fasteners. Modify trim as required to conform to surrounding construction details.

- - - E N D - - -

**SECTION 10 13 00
DIRECTORIES**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies interior directories.

1.2 RELATED WORK

- A. Section 10 14 00, SIGNAGE; Section 10 13 00, DIRECTORIES.

1.3 MANUFACTURER'S QUALIFICATIONS

- A. Sign manufacturer shall provide evidence that they regularly and presently manufacture signs similar to those specified in this section as one of their principal products.

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Samples: Directory panels and frames, with letters and symbols, each type. Submit 2 sets. One set of samples will be retained by Project Engineer, other returned to Contractor.
1. Color samples of each color, 150 mm x 150 mm (6 inches x 6 inches. Show anticipated range of color and texture.
 2. Sample of typeface, arrow and symbols in a typical full size layout.
- C. Manufacturer's Literature:
1. Showing the methods and procedures proposed for the concealed anchorage of the directory system to each surface type.
 2. Manufacturer's printed specifications, anchorage details, installation and maintenance instructions.
- D. Samples: Directory location plan, showing location, type and total number of signs required.
- E. Shop Drawings: Scaled for manufacture and fabrication of sign types. Identify materials, show joints, welds, anchorage, accessory items, mounting and finishes.
- F. Full size layout patterns for dimensional letters.

1.5 DELIVERY AND STORAGE

- A. Deliver materials to job in manufacturer's original sealed containers with brand name marked thereon. Protect materials from damage.
- B. Package to prevent damage or deterioration during shipment, handling, storage and installation. Maintain protective covering in place and in good repair until removal is necessary.
- C. Deliver directories only when the site and mounting services are ready for installation work to proceed.
- D. Store products in dry condition inside enclosed facilities.

1.6 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - B209-07.....Aluminum and Aluminum-Alloy Sheet and Plate
 - B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and tubes.
- C. Federal Specifications (Fed Spec):
 - MIL-PRF-8184F.....Plastic Sheet, Acrylic, Modified.
 - MIL-P-46144C.....Plastic Sheet, Polycarbonate

1.7 MINIMUM SIGN REQUIREMENTS

- A. Directional/Informational Signs:
 - 1. Type Styles: Helvetica Medium Characters shall have a width-to-height ratio between 3:5 and 1:1. Characters shall have a stroke width-to-height ratio of between 1:5 and 1:10.
 - 2. Character Height: minimum 75 mm (3 in) high for overhead signs. As shown, for directional signs.
 - 4. Mounting Location: As shown.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Signs of type, size and design shown on the drawings and as specified.
- B. Signs complete with lettering, framing and related components for a complete installation.
- C. Provide graphics items as completed units produced by a single manufacturer, including necessary mounting accessories, fittings and fastenings.
- D. Do not scale drawings for dimensions. Contractor to verify and be responsible for all dimensions and conditions shown by these drawings. Project Engineer to be notified of any discrepancy in drawing, in field directions or conditions, and/or of any changes required for all such construction details.
- E. The Sign Contractor, by commencing work of this section, assumes overall responsibility, as part of his warranty of work, to assure that assemblies, components and parts shown or required within the work of the section, comply with the Contract Documents. The Contractor shall further warrant: That all components, specified or required to satisfactorily complete the installation are compatible with each other and with conditions of installations.

2.2 PRODUCTS

- A. Frame: Metal, premium alloy, precision mitered corners, satin or semi-gloss Black finish. Profile and finish to match existing.
- B. Sign Panel:
 - 1. Matte Black plastic, two color Black/White 1/8" thick at engraved header panel.
 - 2. Matte Black plastic, 1/8" thick at White die cut lettered directory panel.
- C. Map Panel:
 - 1. Printed or screened graphic on matte White panel, applied to matted Black plastic backup panel.
- D. Type Style:
 - 1. Helvetica Medium, Helvetica Italic, and Seriph Style Letters where indicated and to match existing.
- E. Size:
 - 1. Overall: 24"H x 36"W.
- F. Match Existing:
 - 1. Verify and match existing directory located at First Floor entrance to Victory Elevators 7 and 8.

2.3 FABRICATION

- A. Design components to allow for expansion and contraction for a minimum material temperature range of 56 °C (100 °F), without causing buckling, excessive opening of joints or over stressing of adhesives, welds and fasteners.
- B. Form work to required shapes and sizes, with true curve lines and angles. Provide necessary rebates, lugs and brackets for assembly of units. Use concealed fasteners whenever and wherever possible.
- C. Shop fabricate so far as practicable. Joints fastened flush to conceal reinforcement, or welded where thickness or section permits.
- D. Contact surfaces of connected members be true. Assembled so joints will be tight and practically unnoticeable, without use of filling compound.
- E. Signs shall have fine, even texture and be flat and sound. Lines and miters sharp, arises unbroken, profiles accurate and ornament true to pattern. Plane surfaces be smooth flat and without oil-canning, free of rack and twist. Maximum variation from plane of surface plus or minus 0.3 mm (0.015 inches). Restore texture to filed or cut areas.
- F. Level or straighten work. Members shall have sharp lines and angles and smooth surfaces.
- G. Extruded members to be free from extrusion marks. Square turns and corners sharp, curves true.

- H. Drill holes for bolts and screws. Conceal fastenings where possible. Exposed ends and edges mill smooth, with corners slightly rounded. Form joints exposed to weather to exclude water.
- I. Pre-assemble items in shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for re-assembly and coordinated installation.
- J. No signs are to be manufactured until final sign message schedule and location review has been completed by the Project Engineer & forwarded to contractor.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Protect products against damage during field handling and installation. Protect adjacent existing and newly placed construction and finishes as necessary to prevent damage during installation. Paint, touch up and patch to match sign and finish of surrounding surface.
- B. Mount directory sign in proper alignment, level and plumb according to the sign location plan and the dimensions given on elevation and sign location drawings. When exact position, angle, height or location is in doubt, contact Project Engineer for clarification.
- C. Contractor shall be responsible for damaged, lost or stolen signs while materials are on the job site and up until the completion and final acceptance of the job.
- D. Remove or correct signs or installation work Project Engineer determines as unsafe or as an unsafe condition.
- E. At completion of sign installation, clean exposed sign surfaces. Clean and repair any adjoining surfaces that became soiled or damaged as a result of installation of signs.
- F. Locate signs as shown on the Sign Location Plans.
- G. Contractor will be responsible for verifying that behind each sign location there are no utility lines that will be affected by installation of signs. Any damage during installation of signs to utilities will be the sole responsibility of the Contractor to correct and repair.

- - - END - - -

SECTION 10 14 00
SIGNAGE

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies ADA compliant interior signage for room numbers, rest room identification, directional signs, and code required signs.

1.2 RELATED WORK

- A. Lighted EXIT signs for egress purposes are specified under Division 26, ELECTRICAL.

1.3 MANUFACTURER'S QUALIFICATIONS

- A. Sign manufacturer shall provide evidence that they regularly and presently manufacture signs similar to those specified in this section as one of their principal products.
- B. Sign Manufacturer shall verify and match existing Fargo VA Standard: 2/90 Signage Systems for interior signage.

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Samples: Sign panels and frames, with letters and symbols, each type with colors, style and type face to match existing Fargo VA System. Approved samples may be used in installation.
- C. Manufacturer's Literature:
 - 1. Showing the methods and procedures proposed for the concealed anchorage of the signage system to each surface type.
 - 2. Manufacturer's printed specifications, anchorage details, installation and maintenance instructions.
- D. Sign Schedule and location plan, showing location, type and total number of signs required.

1.5 DELIVERY AND STORAGE

- A. Deliver materials to job in manufacturer's original sealed containers with brand name marked thereon. Protect materials from damage.
- B. Package to prevent damage or deterioration during shipment, handling, storage and installation. Maintain protective covering in place and in good repair until removal is necessary.
- C. Deliver signs only when the site and mounting services are ready for installation work to proceed.
- D. Store products in dry condition inside enclosed facilities.

1.6 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - B209-07.....Aluminum and Aluminum-Alloy Sheet and Plate
 - B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and tubes.
- C. Federal Specifications (Fed Spec):
 - MIL-PRF-8184F.....Plastic Sheet, Acrylic, Modified.
 - MIL-P-46144C.....Plastic Sheet, Polycarbonate

PART 2 - PRODUCTS

2.1 GENERAL

- A. Signs of type, size and design shown on the attached Sign Message Schedule and Sign Type Drawings; and as specified.
- B. Signs complete with lettering, framing and related components for a complete installation.
- C. Provide graphics items as completed units produced by a single manufacturer, including necessary mounting accessories, fittings and fastenings.
- D. Do not scale drawings for dimensions. Contractor to verify and be responsible for all dimensions and conditions shown by these drawings. Project Engineer to be notified of any discrepancy in drawing, in field directions or conditions, and/or of any changes required for all such construction details.
- E. The Sign Contractor, by commencing work of this section, assumes overall responsibility, as part of his warranty of work, to assure that assemblies, components and parts shown or required within the work of the section, comply with the Contract Documents. The Contractor shall further warrant: That all components, specified or required to satisfactorily complete the installation are compatible with each other and with conditions of installations.

2.2 PRODUCTS

- A. Interior Signage to be equal to signs as manufactured by 2/90 Signage Systems and installed at Fargo VA.
- B. Aluminum:
 - 1. Sheet and Plate: ASTM B209.
 - 2. Extrusions and Tubing: ASTM B221.

- C. Cast Acrylic Sheet: MIL-PRF-8184F; Type II, class 1, Water white non-glare optically clear. Matt finish water white clear acrylic shall not be acceptable.
- D. Polycarbonate: MIL-P-46144C; Type I, class 1.
- E. Vinyl: 0.1 mm thick machine cut, having a pressure sensitive adhesive and integral colors.
- F. Electrical Signs:
 - 1. General: Furnish and install all lighting, electrical components, fixtures and lamps ready for use in accordance with the sign type drawings, details and specifications.
 - 2. Refer to Electrical Specifications Section, Division 26, ELECTRICAL, to verify line voltages for sign locations that require electrical signs.
 - 3. Quality Control: Installed electrical components and sign installations are to bear the label and certification of Underwriter's Laboratories, Inc., and are to comply with National Electrical Code as well as applicable federal, state and local codes for installation techniques, fabrication methods and general product safety.
 - 4. Ballast and Lighting Fixtures: See Electrical Specifications.
- G. Concrete Post Footings: See Section 03 30 00, CAST-IN-PLACE CONCRETE.
- H. Steel: See Section 05 12 00, STRUCTURAL STEEL FRAMING.

2.3 SIGN STANDARDS

- A. Typography:
 - 1. Type Style: Helvetica Regular. Initial caps or all caps as indicated in Sign Message Schedule.
 - 2. Symbols: See attached graphic standards.
 - 3. All text, arrows, and symbols to be provided in size, colors, typefaces and letter spacing to match existing system. Final text for signs is listed on attached Sign Message Schedule.

2.4 SIGN TYPES

- A. General:
 - 1. The interior sign system is comprised of sign types families that are identified by a letter and number which identify a particular group of signs. An additional number identifies a specific type of sign within that family.
 - 2. Sign types, quantities and locations area as indicated on the attached Signage Schedule and Plans.

2.5 FABRICATION

- A. Form work to required shapes and sizes, with true curve lines and angles. Use concealed fasteners whenever and wherever possible.

- B. Extruded members to be free from extrusion marks. Square turns and corners sharp, curves true.
- C. No signs are to be manufactured until final sign message schedule and location review has been completed by the Project Engineer & forwarded to contractor.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Protect products against damage during field handling and installation. Protect adjacent existing and newly placed construction, landscaping and finishes as necessary to prevent damage during installation.
- B. Mount signs in proper alignment, level and plumb according to the sign location plan and schedule. Install as indicated on attached Sign Message Schedule. See attached Installation Guidelines, Mounting Methods and Mount Locations. When exact position, angle, height or location is in doubt, contact Project Engineer for clarification.
- C. Contractor shall be responsible for all signs that are damaged, lost or stolen while materials are on the job site and up until the completion and final acceptance of the job.
- D. Remove or correct signs or installation work Project Engineer determines as unsafe or as an unsafe condition.
- E. At completion of sign installation, clean exposed sign surfaces. Clean and repair any adjoining surfaces and landscaping that became soiled or damaged as a result of installation of signs.
- F. Contractor will be responsible for verifying that behind each sign location there are no utility lines that will be affected by installation of signs. Any damage during installation of signs to utilities will be the sole responsibility of the Contractor to correct and repair.

- - - END - - -

BASEMENT INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
1	A1 INSTALL NOTE			D/1	existing, reinstall as-is
2	A16 INSTALL NOTE	1 2 3	Storage BB-91	D/1	
3	E15 INSTALL NOTE			I.1/5	existing, reinstall as-is
3A	B8 INSTALL NOTE			A/4	existing, reinstall as-is place 2" from cabinet frame
4	A15	1 2	BB-92	D/1	
5	A16	1 2 3	Storage BB-91	D/2	
6	A15	1 2	Electrical BB-94	D/1	
7	A1	1 2 3 4 5 6	Fitness Center BB-95	D/7	
8	A15	1 2	Women's Lockers BB-95A	D/1	
9	A15	1 2	Men's Lockers BB-95B	D/1	
10	A1	1 2 3 4 5 6	Back-Up Emergency Center BB-96	D/1	
11	A16	1 2 3	Storage BB-97	D/1	
12	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
12A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
13	A15	1 2	Mechanical BB-100	D/1	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
1	A16 INSTALL NOTE			D/1	Existing; reinstall as-is
2	INSTALL NOTE			A/3	Existing MRI Zone 2 sign; reinstall as-is
3	B1 INSTALL NOTE			D/1	Existing; reinstall as-is
4	E15 INSTALL NOTE			I.1/5	Existing; reinstall as-is
4A	B8 INSTALL NOTE			A/4	Existing; reinstall as-is Place 2" from cabinet frame
5	A15 INSTALL NOTE			D/1	Existing; reinstall as-is
6	A16	1 2 3	Storage 1B-82	D/1	
7	G5	1 2 3	ATTENTION Press Call Button for Assistance	D/4	Place 2" to side of intercom
8	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
9	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
10	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
11	E15 INSTALL NOTE			I.1/5	Existing; reinstall as-is
11A	B8 INSTALL NOTE			A/4	Existing; reinstall as-is Place 2" from cabinet frame
12	B1 INSTALL NOTE			D/2	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
13	A1	1 2 3 4 5 6	Nurse Station 1B-100	A/3	
14	A16	1 2 3	Medication 1B-100A	A/1	
15	A1	1 2 3 4 5 6	 Triage 1B-101	A/1	
16	A1	1 2 3 4 5 6	 Triage 1B-101	D/1	
17	F1 INSTALL NOTE			A/3	Existing; reinstall as-is
18	G5	1 2 3	ATTENTION Press Call Button for Assistance	D/4	Place 2" to side of intercom
19	E2 INSTALL NOTE	1 2 3		D/6	Existing; reinstall as-is
20	F1	1 2 3 4	(sym DNE) Patient Escort Required	A/3	
21	F1	1 2 3 4	(sym DNE) Patient Escort Required	A/3	
22	E10	1a 2a	(sym AR1 UP) Main Lobby (sym AR1 UP) Waiting Room	D/6	Face B no copy
23	F1 INSTALL NOTE			A/3	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
24	E15 INSTALL NOTE			I.1/5	Existing; reinstall as-is
24A	B8 INSTALL NOTE			A/4	Existing; reinstall as-is Place 2" from cabinet frame
25	A7	1 2 3	Exam Room 1 1B-102	A/1	
26	A7	1 2 3	Exam Room 2 1B-103	A/1	
27	A7	1 2 3	Treatment 1 1B-104	A/1	
27A	F6 INSTALL NOTE			A/4	Existing; reinstall as-is Place 1/2" centered above room sign
28	A7	1 2 3	Treatment 2 1B-105	A/1	
28A	F6 INSTALL NOTE			A/4	Existing; reinstall as-is Place 1/2" centered above room sign
29	A7	1 2 3	Exam Room 3 1B-106	A/1	
30	A7	1 2 3	Exam Room 4 1B-107	A/1	
31	A15	1 2	Restroom 1B-107A	A/1	
32	A13	1 2 3 4	1B-108 (sym UNI/HCP1) RESTROOM (sym HCP1)	A/1	Braille translation to read "Accessible Restroom"
32A	G8	1 2 3 4	(sym BABY2) Changing Station Located in Restroom	A/3	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
33	E12	1a	(sym UNI/HCP1)	I.1/5	
		2a	RESTROOM		
		1b	(sym UNI/HCP1)		
		2b	RESTROOM		
34	A16	1	Equipment Storage	A/2	
		2			
		3	1B-109		
35	A2	1	Clean Linen	A/2	
		2	Staff Only		
		3	Keep Door Closed		
		4	1B-110		
36	A16	1	Staff Restroom	A/1	
		2			
		3	1B-112		
37	A1	1		A/1	
		2			
		3	On Call		
		4			
		5			
		6	1B-113		
38	A2	1	Breakroom	D/1	
		2			
		3	Staff Only		
		4	1B-114		
39	A1	1		A/1	
		2			
		3	Physician		
		4			
		5			
		6	1B-115		
40	A2	1	Decontamination	A/1	
		2	Staff Only		
		3	Keep Door Closed		
		4	1B-116		
41	F1	1		A/3	
		2	(sym DNE)		
		3	Authorized		
		4	Personnel Only		
42	G5	1	ATTENTION	D/4	Place 2" to side of intercom
		2	Press Call Button		
		3	for Assistance		

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
43	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
44	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
45	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
45A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
46	A15	1 2	Electrical 1B-121A	D/1	
47	E10	1a 2b	(sym AR1 UL) Main Lobby (sym AR1 UL) Waiting Room	D/6	Face B no copy
48	A15	1 2	1B-121B	D/1	
49	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
49A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
50	A2	1 2 3 4	Soiled Utility Staff Only Keep Door Closed 1B-122	A/1	
51	A15	1 2	EMMS 1A-123	D/1	
52	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
52A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
53	A2	1 2 3 4	Clean Utility Staff Only Keep Door Closed 1B-124	A/1	
54	A7	1 2 3	Exam Room 5 1B-125	A/1	
55	A7	1 2 3	Exam Room 6 1B-126	A/1	
56	A7	1 2 3	Treatment (sym AR1 RT) 3 1B-127A	A/7	
57	A7	1 2 3	(sym AR1 LF) Treatment 4 1B-127B	A/3	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
58	A7	1 2 3	Treatment (sym AR1 RT) 5 1B-128A	A/4	Place 1/2" centered above Sign 57
59	A7	1 2 3	(sym AR1 LF) Treatment 6 1B-128B	A/7	
60	A16 INSTALL NOTE			D/2	Existing; reinstall as-is
61	E6 INSTALL NOTE			S/5	Existing; reinstall as-is Hang so bottom of sign is 89" AFF
62	C6 INSTALL NOTE	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1 (sym AR1 UL) Medical Imaging Outpatient Pharmacy (sym AR1 DL) Main Lobby / North Parking Lot Agent Cashier / Travel Office Dental Clinic Emergency Department Laboratory Primary Care Clinics (CBLUE,CGOLD,CRED)	D/3	Existing; revise text for copy lines 3 thru 5 and 7 thru 9 as shown and reinstall Top of sign at 74"
63	E6 INSTALL NOTE			I.1/4	Existing; reinstall as-is Place so end of sign is in-line with corridor wall
64	D1 INSTALL NOTE			A/3	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
65	C13 INSTALL NOTE	1	1	D/3	Existing; revise text for copy lines 3 thru 13 shown and reinstall Top of sign at 76"
		2	(sym AR1 RT)		
		3	Medical Imaging		
		4	Outpatient Pharmacy		
		5	(sym AR1 DL)		
		6	Emergency Department		
		7	(sym AR1 UL)		
		8	Main Lobby / North Parking Lot		
		9	Agent Cashier / Travel Office		
		10	Dental Clinic		
		11	Emergency Department		
		12	Laboratory		
		13	Primary Care Clinics (CBLUE,CGOLD,CRED)		
		14	(sym AR1 UL)		
		15	(sym IELE) Independence Elevators		
		16	(sym AR1 RT)		
		17	(sym LELE) Liberty Elevators		
66	C14 INSTALL NOTE	1	1	D/7	Existing; revise text for copy lines 2 thru 12 shown and reinstall Top of sign at 76"
		2	(sym AR1 UR)		
		3	Medical Imaging		
		4	Outpatient Pharmacy		
		5	(sym AR1 DR)		
		6	Emergency Department		
		7	(sym AR1 LF)		
		8	Agent Cashier / Travel Office		
		9	Dental Clinic		
		10	Patriot Elevator		
		11	Laboratory		
		12	Primary Care Clinics (CBLUE,CGOLD,CRED)		
		13	(sym AR1 LF)		
		14	(sym IELE) Independence Elevators		
		15	(sym AR1 RT)		
		16	(sym LELE) Liberty Elevators		
		17	(sym AR1 RT)		
		18	(sym VELE) Victory Elevators		
67	A15 INSTALL NOTE			D/1	Existing; reinstall as-is
68	E1 INSTALL NOTE			I.1/5	Existing; reinstall as-is
69	A18 INSTALL NOTE			D/7	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
70	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
70A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
71	E4 INSTALL NOTE			I.1/5	Existing; reinstall as-is
71A	G7	1 2 3 4 5 6 7	ATTENTION If You Have Been Waiting 15 Minutes Past Your Scheduled Appointment Please Inform The Receptionist	D/3	
72	G5 INSTALL NOTE			D/4	Existing; reinstall as-is Place at box, exact location TBD
73	G6 INSTALL NOTE			D/4	Existing; reinstall as-is Place at box, exact location TBD
73A	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 1" above Sign 73
74	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 2" to the left of window at SH
75	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 2" to the left of Sign 74
76	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 2" to the left of Sign 75
77	A1 INSTALL NOTE	1 2 3 4 5 6	Waiting Room 1C-32	D/3	Existing; revise text for copy lines 3 and 4 as shown and reinstall

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
78	C14 INSTALL NOTE	1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18	1 (sym AR1 UP) Main Lobby / North Parking Lot Emergency Department (sym AR1 DL) Medical Imaging Outpatient Pharmacy (sym AR1 RT) Agent Cashier / Travel Office Dental Clinic Laboratory Patriot Elevator (sym AR1 RT) (sym IELE) Independence Elevators (sym AR1 LF) (sym LELE) Liberty Elevators (sym AR1 LF)	D/7	Existing; revise text for copy lines 2 thru 18 shown and reinstall Top of sign at 76"
79	C11 INSTALL NOTE	1 2 3 4 5 6 7 8 9 10 11 12 13	1 (sym AR1 RT) Main Lobby / North Parking Lot Emergency Department (sym AR1 LF) Outpatient Pharmacy (sym AR1 UL) Medical Imaging (sym AR1 LF) (sym LELE) Liberty Elevators (sym AR1 UL) (sym VELE) Victory Elevators	D/7	Existing; revise text for copy lines 2 thru 8 shown and reinstall Top of sign at 74"
80	D1		(Key Location Directory, see sign type)	D/3	
80 PP1	L1		(You Are Here Location Plan insert)	na	not shown on plan place in sign frame
80 PP2	L2		(Key Location by Elevators insert)	na	not shown on plan place in sign frame
81	J1	1 2	(sym VELE) Victory	R/4	place on elevator doors as shown in Sign Type
82	B9	1 2	Elevator 8	A/4	center above elevator on frame

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
83	E6	1a 2a 3a 1b 2b 3b	(sym VELE) Victory Elevators (sym VELE) Victory Elevators	S/5	Hang so bottom of sign is 89" AFF
84	J1	1 2	(sym VELE) Victory	R/4	place on elevator doors as shown in Sign Type
85	B9	1 2	Elevator 7	A/4	center above elevator on frame
86	E6	1a 2a 3a 1b 2b 3b	(sym VELE) Victory Elevators (sym VELE) Victory Elevators	S/5	Hang so bottom of sign is 89" AFF
87	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
87A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
88	E12 INSTALL NOTE			S/5	Existing; reinstall as-is 6" cable drops; attach to 1" grid; bottom of sign at 89"
89	A13	1 2 3 4	1C-33 (sym UNI/HCP1) RESTROOM (sym HCP1)	D/1	Braille translation to read "Accessible Restroom"
90	G8 INSTALL NOTE			A/3	Existing; reinstall as-is
91	A13	1 2 3 4	1C-34 (sym UNI/HCP1) RESTROOM (sym HCP1)	D/1	Braille translation to read "Accessible Restroom"
92	G8 INSTALL NOTE			A/3	Existing; reinstall as-is
93	A16	1 2 3	Staff Only 1C-35	D/1	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
94	A1	1 2 3 4 5 6	Telephone Operator 1C-35A	D/7	
95	A1	1 2 3 4 5 6	Agent Cashier 1C-35D	D/1	
96	A1	1 2 3 4 5 6	Travel Office 1C-35E	D/1	
97	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
97A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
98	A2	1 2 3 4	Breakroom Staff Only 1C-35F	D/1	
99	A16	1 2 3	Staff Restroom 1C-35FA	A/1	
100	A16	1 2 3	Staff Only 1C-35	D/1	
101	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
101A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
102	A1	1 2 3 4 5 6	Waiting Room 1C-36	D/3	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
102A	G7	1 2 3 4 5 6 7	ATTENTION If You Have Been Waiting 15 Minutes Past Your Scheduled Appointment Please Inform The Receptionist	D/3	
102B	G7	1 2 3 4 5 6 7	ATTENTION If You Have Been Waiting 15 Minutes Past Your Scheduled Appointment Please Inform The Receptionist	D/3	
103	E1 INSTALL NOTE			S/5	Existing; reinstall as-is 3" cable drops; attach to 1" grid; bottom of sign at 89"
104	E20 INSTALL NOTE			M/4	Existing; reinstall as-is Center on second desk; attach to bottom of soffit; hold sign back 2" from front edge
105	E1 INSTALL NOTE			D/4	Existing; reinstall as-is Center on first desk; attach to face of soffit; bottom of sign at 92"
106	J5		(no copy required)	R/4	place 1" from center of window at SH
106A	G4 INSTALL NOTE			A/4	Existing; reinstall as-is place on applique
107	J5		(no copy required)	R/4	place 1" from center of window at SH
107A	G4 INSTALL NOTE			A/4	Existing; reinstall as-is place on applique
108	G6 INSTALL NOTE			D/4	Existing; reinstall as-is place sign 2" beside phone
109	E12 INSTALL NOTE			K6	Existing; reinstall as-is Bottom of sign at 89"
110	D2 INSTALL NOTE			D/3	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
111	E10	1a 2a 1b 2b	Coffee Counter Coffee Counter	S/4	Place in line with end of adjacent wall; center on width of coffee area; 6" cable drops; attach to 1" grid; bottom of sign at 89"
112	E2 INSTALL NOTE			D/6	Center on adjacent column; attach to face of soffit; hold 1" up from bottom of soffit
113	A1	1 2 3 4 5 6	 Patient Advocate 1C-40	D/1	
114	E19 INSTALL NOTE			D/4	Existing; reinstall as-is Center on doorway; 1" above frame
115	C8 INSTALL NOTE	1 2 3 4 5 6 7 8 9 10 11 12	1 (sym AR1 UL) Infusion Center Primary Care Clinics (CBLUE,CGOLD,CRED) (sym AR1 UL) Elevator Access To Patriot Café & Patriot Store (sym AR1 UL) (sym PELE) Patriot Elevator	D/7	Existing; revise text for copy lines 2, 6 and 11 as shown and reinstall Top of sign at 68"
116	E9 INSTALL NOTE			J/4	Existing; reinstall as-is 11" cable drops; bottom of sign at 89"
117	A1	1 2 3 4 5 6	Health Information Management Release of Information 1C-41	D/1	
118	E1 INSTALL NOTE			I.1/5	Existing; reinstall as-is
119	G3 INSTALL NOTE			D/2	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
120	A1	1 2 3 4 5 6	Police Office 1C-41	D/1	
121	G6 INSTALL NOTE			D/4	Existing; reinstall as-is Place sign 2" beside phone
122	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
122A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame

BASEMENT INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
1	A1 INSTALL NOTE			D/1	existing, reinstall as-is
2	A16 INSTALL NOTE	1 2 3	Storage BB-91	D/1	
3	E15 INSTALL NOTE			I.1/5	existing, reinstall as-is
3A	B8 INSTALL NOTE			A/4	existing, reinstall as-is place 2" from cabinet frame
4	A15	1 2	BB-92	D/1	
5	A16	1 2 3	Storage BB-91	D/2	
6	A15	1 2	Electrical BB-94	D/1	
7	A1	1 2 3 4 5 6	Fitness Center BB-95	D/7	
8	A15	1 2	Women's Lockers BB-95A	D/1	
9	A15	1 2	Men's Lockers BB-95B	D/1	
10	A1	1 2 3 4 5 6	Back-Up Emergency Center BB-96	D/1	
11	A16	1 2 3	Storage BB-97	D/1	
12	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
12A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
13	A15	1 2	Mechanical BB-100	D/1	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
1	A16 INSTALL NOTE			D/1	Existing; reinstall as-is
2	INSTALL NOTE			A/3	Existing MRI Zone 2 sign; reinstall as-is
3	B1 INSTALL NOTE			D/1	Existing; reinstall as-is
4	E15 INSTALL NOTE			I.1/5	Existing; reinstall as-is
4A	B8 INSTALL NOTE			A/4	Existing; reinstall as-is Place 2" from cabinet frame
5	A15 INSTALL NOTE			D/1	Existing; reinstall as-is
6	A16	1 2 3	Storage 1B-82	D/1	
7	G5	1 2 3	ATTENTION Press Call Button for Assistance	D/4	Place 2" to side of intercom
8	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
9	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
10	F1	1 2 3 4	(sym DNE) Authorized Personnel Only	A/3	
11	E15 INSTALL NOTE			I.1/5	Existing; reinstall as-is
11A	B8 INSTALL NOTE			A/4	Existing; reinstall as-is Place 2" from cabinet frame
12	B1 INSTALL NOTE			D/2	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
13	A1	1 2 3 4 5 6	Nurse Station 1B-100	A/3	
14	A16	1 2 3	Medication 1B-100A	A/1	
15	A1	1 2 3 4 5 6	Triage 1B-101	A/1	
16	A1	1 2 3 4 5 6	Triage 1B-101	D/1	
17	F1 INSTALL NOTE			A/3	Existing; reinstall as-is
18	G5	1 2 3	ATTENTION Press Call Button for Assistance	D/4	Place 2" to side of intercom
19	E2 INSTALL NOTE	1 2 3		D/6	Existing; reinstall as-is
20	F1	1 2 3 4	(sym DNE) Patient Escort Required	A/3	
21	F1	1 2 3 4	(sym DNE) Patient Escort Required	A/3	
22	E10	1a 2a	(sym AR1 UP) Main Lobby (sym AR1 UP) Waiting Room	D/6	Face B no copy
23	F1 INSTALL NOTE			A/3	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
24	E15 INSTALL NOTE			I.1/5	Existing; reinstall as-is
24A	B8 INSTALL NOTE			A/4	Existing; reinstall as-is Place 2" from cabinet frame
25	A7	1 2 3	Exam Room 1 1B-102	A/1	
26	A7	1 2 3	Exam Room 2 1B-103	A/1	
27	A7	1 2 3	Treatment 1 1B-104	A/1	
27A	F6 INSTALL NOTE			A/4	Existing; reinstall as-is Place 1/2" centered above room sign
28	A7	1 2 3	Treatment 2 1B-105	A/1	
28A	F6 INSTALL NOTE			A/4	Existing; reinstall as-is Place 1/2" centered above room sign
29	A7	1 2 3	Exam Room 3 1B-106	A/1	
30	A7	1 2 3	Exam Room 4 1B-107	A/1	
31	A15	1 2	Restroom 1B-107A	A/1	
32	A13	1 2 3 4	1B-108 (sym UNI/HCP1) RESTROOM (sym HCP1)	A/1	Braille translation to read "Accessible Restroom"
32A	G8	1 2 3 4	(sym BABY2) Changing Station Located in Restroom	A/3	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
33	E12	1a	(sym UNI/HCP1)	I.1/5	
		2a	RESTROOM		
		1b	(sym UNI/HCP1)		
		2b	RESTROOM		
34	A16	1	Equipment Storage	A/2	
		2			
		3	1B-109		
35	A2	1	Clean Linen	A/2	
		2	Staff Only		
		3	Keep Door Closed		
		4	1B-110		
36	A16	1	Staff Restroom	A/1	
		2			
		3	1B-112		
37	A1	1		A/1	
		2			
		3	On Call		
		4			
		5			
		6	1B-113		
38	A2	1	Breakroom	D/1	
		2			
		3	Staff Only		
		4	1B-114		
39	A1	1		A/1	
		2			
		3	Physician		
		4			
		5			
		6	1B-115		
40	A2	1	Decontamination	A/1	
		2	Staff Only		
		3	Keep Door Closed		
		4	1B-116		
41	F1	1		A/3	
		2	(sym DNE)		
		3	Authorized		
		4	Personnel Only		
42	G5	1	ATTENTION	D/4	Place 2" to side of intercom
		2	Press Call Button		
		3	for Assistance		

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
43	F1	1		A/3	
		2	(sym DNE)		
		3	Authorized		
		4	Personnel Only		
44	F1	1		A/3	
		2	(sym DNE)		
		3	Authorized		
		4	Personnel Only		
45	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
45A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
46	A15	1	Electrical	D/1	
		2	1B-121A		
47	E10	1a	(sym AR1 UL) Main Lobby	D/6	Face B no copy
		2b	(sym AR1 UL) Waiting Room		
48	A15	1		D/1	
		2	1B-121B		
49	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
49A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
50	A2	1	Soiled Utility	A/1	
		2	Staff Only		
		3	Keep Door Closed		
		4	1B-122		
51	A15	1	EMMS	D/1	
		2	1A-123		
52	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
52A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
53	A2	1	Clean Utility	A/1	
		2	Staff Only		
		3	Keep Door Closed		
		4	1B-124		
54	A7	1	Exam Room	A/1	
		2	5		
		3	1B-125		
55	A7	1	Exam Room	A/1	
		2	6		
		3	1B-126		
56	A7	1	Treatment (sym AR1 RT)	A/7	
		2	3		
		3	1B-127A		
57	A7	1	(sym AR1 LF) Treatment	A/3	
		2	4		
		3	1B-127B		

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
58	A7	1 2 3	Treatment (sym AR1 RT) 5 1B-128A	A/4	Place 1/2" centered above Sign 57
59	A7	1 2 3	(sym AR1 LF) Treatment 6 1B-128B	A/7	
60	A16 INSTALL NOTE			D/2	Existing; reinstall as-is
61	E6 INSTALL NOTE			S/5	Existing; reinstall as-is
62	C6 INSTALL NOTE	1 2 3 4 5 6 7 8 9 10 11 12 13 14	1 (sym AR1 UL) Medical Imaging Outpatient Pharmacy (sym AR1 DL) Main Lobby / North Parking Lot Agent Cashier / Travel Office Dental Clinic Emergency Department Laboratory Primary Care Clinics (CBLUE,CGOLD,CRED)	D/3	Existing; revise text for copy lines 3 thru 5 and 7 thru 9 as shown and reinstall Top of sign at 74"
63	E6 INSTALL NOTE			I.1/4	Existing; reinstall as-is Place so end of sign is in-line with corridor wall
64	D1 INSTALL NOTE			A/3	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
65	C13 INSTALL NOTE	1	1	D/3	Existing; revise text for copy lines 3 thru 13 shown and reinstall Top of sign at 76"
		2	(sym AR1 RT)		
		3	Medical Imaging		
		4	Outpatient Pharmacy		
		5	(sym AR1 DL)		
		6	Emergency Department		
		7	(sym AR1 UL)		
		8	Main Lobby / North Parking Lot		
		9	Agent Cashier / Travel Office		
		10	Dental Clinic		
		11	Emergency Department		
		12	Laboratory		
		13	Primary Care Clinics (CBLUE,CGOLD,CRED)		
		14	(sym AR1 UL)		
		15	(sym IELE) Independence Elevators		
		16	(sym AR1 RT)		
		17	(sym LELE) Liberty Elevators		
66	C14 INSTALL NOTE	1	1	D/7	Existing; revise text for copy lines 2 thru 12 shown and reinstall Top of sign at 76"
		2	(sym AR1 UR)		
		3	Medical Imaging		
		4	Outpatient Pharmacy		
		5	(sym AR1 DR)		
		6	Emergency Department		
		7	(sym AR1 LF)		
		8	Agent Cashier / Travel Office		
		9	Dental Clinic		
		10	Patriot Elevator		
		11	Laboratory		
		12	Primary Care Clinics (CBLUE,CGOLD,CRED)		
		13	(sym AR1 LF)		
		14	(sym IELE) Independence Elevators		
		15	(sym AR1 RT)		
		16	(sym LELE) Liberty Elevators		
		17	(sym AR1 RT)		
		18	(sym VELE) Victory Elevators		
67	A15 INSTALL NOTE			D/1	Existing; reinstall as-is
68	E1 INSTALL NOTE			I.1/5	Existing; reinstall as-is
69	A18 INSTALL NOTE			D/7	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
70	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
70A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
71	E4 INSTALL NOTE			I.1/5	Existing; reinstall as-is
71A	G7	1 2 3 4 5 6 7	ATTENTION If You Have Been Waiting 15 Minutes Past Your Scheduled Appointment Please Inform The Receptionist	D/3	
72	G5 INSTALL NOTE			D/4	Existing; reinstall as-is Place at box, exact location TBD
73	G6 INSTALL NOTE			D/4	Existing; reinstall as-is Place at box, exact location TBD
73A	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 1" above Sign 73
74	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 2" to the left of window at SH
75	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 2" to the left of Sign 74
76	G3 INSTALL NOTE			D/4	Existing; reinstall as-is Place 2" to the left of Sign 75
77	A1 INSTALL NOTE	1 2 3 4 5 6	Waiting Room 1C-32	D/3	Existing; revise text for copy lines 3 and 4 as shown and reinstall

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
78	C14 INSTALL NOTE	1	1	D/7	Existing; revise text for copy lines 2 thru 18 shown and reinstall Top of sign at 76"
		2	(sym AR1 UP)		
		3	Main Lobby / North Parking Lot		
		4	Emergency Department		
		5	(sym AR1 DL)		
		6	Medical Imaging		
		7	Outpatient Pharmacy		
		8	(sym AR1 RT)		
		9	Agent Cashier / Travel Office		
		10	Dental Clinic		
		11	Laboratory		
		12	Patriot Elevator		
		13			
		14	(sym AR1 RT)		
		15	(sym IELE) Independence Elevators		
		16	(sym AR1 LF)		
		17	(sym LELE) Liberty Elevators		
		18	(sym AR1 LF)		
79	C11 INSTALL NOTE	1	1	D/7	Existing; revise text for copy lines 2 thru 8 shown and reinstall Top of sign at 74"
		2	(sym AR1 RT)		
		3	Main Lobby / North Parking Lot		
		4	Emergency Department		
		5	(sym AR1 LF)		
		6	Outpatient Pharmacy		
		7	(sym AR1 UL)		
		8	Medical Imaging		
		9			
		10	(sym AR1 LF)		
		11	(sym LELE) Liberty Elevators		
		12	(sym AR1 UL)		
		13	(sym VELE) Victory Elevators		
80	D1		<i>(Key Location Directory, see sign type)</i>	D/3	
80 PP1	L1		<i>(You Are Here Location Plan insert)</i>	na	not shown on plan place in sign frame
80 PP2	L2		<i>(Key Location by Elevators insert)</i>	na	not shown on plan place in sign frame
81	J1	1	(sym VELE)	R/4	place on elevator doors as shown in Sign Type
		2	Victory		
82	B9	1	Elevator	A/4	center above elevator on frame
		2	8		

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
83	E6	1a 2a 3a 1b 2b 3b	(sym VELE) Victory Elevators (sym VELE) Victory Elevators	S/5	Hang so bottom of sign is 89" AFF
84	J1	1 2	(sym VELE) Victory	R/4	place on elevator doors as shown in Sign Type
85	B9	1 2	Elevator 7	A/4	center above elevator on frame
86	E6	1a 2a 3a 1b 2b 3b	(sym VELE) Victory Elevators (sym VELE) Victory Elevators	S/5	Hang so bottom of sign is 89" AFF
87	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
87A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
88	E12 INSTALL NOTE			S/5	Existing; reinstall as-is 6" cable drops; attach to 1" grid; bottom of sign at 89"
89	A13	1 2 3 4	1C-33 (sym UNI/HCP1) RESTROOM (sym HCP1)	D/1	Braille translation to read "Accessible Restroom"
90	G8 INSTALL NOTE			A/3	Existing; reinstall as-is
91	A13	1 2 3 4	1C-34 (sym UNI/HCP1) RESTROOM (sym HCP1)	D/1	Braille translation to read "Accessible Restroom"
92	G8 INSTALL NOTE			A/3	Existing; reinstall as-is
93	A16	1 2 3	Staff Only 1C-35	D/1	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
94	A1	1 2 3 4 5 6	Telephone Operator 1C-35A	D/7	
95	A1	1 2 3 4 5 6	Agent Cashier 1C-35D	D/1	
96	A1	1 2 3 4 5 6	Travel Office 1C-35E	D/1	
97	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
97A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
98	A2	1 2 3 4	Breakroom Staff Only 1C-35F	D/1	
99	A16	1 2 3	Staff Restroom 1C-35FA	A/1	
100	A16	1 2 3	Staff Only 1C-35	D/1	
101	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
101A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame
102	A1	1 2 3 4 5 6	Waiting Room 1C-36	D/3	

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
102A	G7	1 2 3 4 5 6 7	ATTENTION If You Have Been Waiting 15 Minutes Past Your Scheduled Appointment Please Inform The Receptionist	D/3	
102B	G7	1 2 3 4 5 6 7	ATTENTION If You Have Been Waiting 15 Minutes Past Your Scheduled Appointment Please Inform The Receptionist	D/3	
103	E1 INSTALL NOTE			S/5	Existing; reinstall as-is 3" cable drops; attach to 1" grid; bottom of sign at 89"
104	E20 INSTALL NOTE			M/4	Existing; reinstall as-is Center on second desk; attach to bottom of soffit; hold sign back 2" from front edge
105	E1 INSTALL NOTE			D/4	Existing; reinstall as-is Center on first desk; attach to face of soffit; bottom of sign at 92"
106	J5		(no copy required)	R/4	place 1" from center of window at SH
106A	G4 INSTALL NOTE			A/4	Existing; reinstall as-is place on applique
107	J5		(no copy required)	R/4	place 1" from center of window at SH
107A	G4 INSTALL NOTE			A/4	Existing; reinstall as-is place on applique
108	G6 INSTALL NOTE			D/4	Existing; reinstall as-is place sign 2" beside phone
109	E12 INSTALL NOTE			K6	Existing; reinstall as-is Bottom of sign at 89"
110	D2 INSTALL NOTE			D/3	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
111	E10	1a 2a 1b 2b	Coffee Counter Coffee Counter	S/4	Place in line with end of adjacent wall; center on width of coffee area; 6" cable drops; attach to 1" grid; bottom of sign at 89"
112	E2 INSTALL NOTE			D/6	Center on adjacent column; attach to face of soffit; hold 1" up from bottom of soffit
113	A1	1 2 3 4 5 6	Patient Advocate 1C-40	D/1	
114	E19 INSTALL NOTE			D/4	Existing; reinstall as-is Center on doorway; 1" above frame
115	C8 INSTALL NOTE	1 2 3 4 5 6 7 8 9 10 11 12	1 (sym AR1 UL) Infusion Center Primary Care Clinics (CBLUE,CGOLD,CRED) (sym AR1 UL) Elevator Access To Patriot Café & Patriot Store (sym AR1 UL) (sym PELE) Patriot Elevator	D/7	Existing; revise text for copy lines 2, 6 and 11 as shown and reinstall Top of sign at 68"
116	E9 INSTALL NOTE			J/4	Existing; reinstall as-is 11" cable drops; bottom of sign at 89"
117	A1	1 2 3 4 5 6	Health Information Management Release of Information 1C-41	D/1	
118	E1 INSTALL NOTE			I.1/5	Existing; reinstall as-is
119	G3 INSTALL NOTE			D/2	Existing; reinstall as-is

FIRST FLOOR INTERIOR SIGN MESSAGE SCHEDULE

SIGN	SIGN TYPE	COPY LINE	MESSAGE	MOUNT	NOTES
120	A1	1 2 3 4 5 6	Police Office 1C-41	D/1	
121	G6 INSTALL NOTE			D/4	Existing; reinstall as-is Place sign 2" beside phone
122	E15		<i>(Extinguisher Sign, See Sign Type)</i>	I.1/5	
122A	B8		<i>(RACE Sign, See Sign Type)</i>	A/4	place 2" from cabinet frame



Department of Veterans Affairs

VAMC MARK Logo
(sym VA MARK)



Department of Veterans Affairs

VAMC MARK1 Logo
(sym VA MARK1)

Circle Colors

Outer Circle

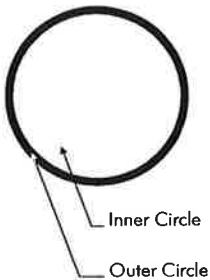
Color: Match Black 204
Match Black Matte 704 (For Overheads)

Inner Circle (General)

Color: Match Sapphire Blue 256 (sym CBLUE)
Match Forest Green 276 (sym CGREEN)
Match Cardinal Red 236 (sym CRED)
Match Gold 160 (sym CGOLD)

Inner Circle for Overheads

Color: Match Sapphire Blue Matte 756 (sym CBLUE)
Match Forest Green Matte 776 (sym CGREEN)
Match Cardinal Red Matte 736 (sym CRED)
Match Gold Matte 760 (sym CGOLD)



VA Seal
(sym VA SEAL)



Arrow 1 Up
(sym AR1 UP)



Arrow 1 Down
(sym AR1 DN)



Arrow 1 Left
(sym AR1 LF)



Arrow 1 Right
(sym AR1 RT)



Arrow 1 Up Left
(sym AR1 UL)



Arrow 1 Down Left
(sym AR1 DL)



Arrow 1 Up Right
(sym AR1 UR)



Arrow 1 Down Right
(sym AR1 DR)



Women
(sym WOM)



Women's Accessible 1
(sym WOM/HCP1)



Men
(sym MEN)



Men's Accessible 1
(sym MEN/HCP1)



Unisex
(sym UNI)



Unisex Accessible 1
(sym UNI/HCP1)



Baby Changing/Nursery 2
(sym BABY2)



Accessible 1
(sym HCP1)



Emergency / First Aid
(sym EMG)



Do Not Enter
(sym DNE)



Telephone
(sym TEL)



Fire Stairs
(sym STAIRS/FIRE)



Fire Extinguisher
(sym FE)



No Flame
(sym NFLAME)



Biohazard
(sym BIO)



Radiation
(sym RAD)



Cash 2
(sym CASH2)



Liberty Elevator
(sym LELE)



Victory Elevator
(sym VELE)



Patriot Elevator
(sym PELE)





Independence Elevator
(sym IELE)



General Elevator
(sym ELE)

Symbols

 Stair Indicator (sym STAIRS)	 Waiting (sym WAIT)				
--	--	--	--	--	--

Installation Guidelines / Disclaimer

Disclaimer

Architectural Sign Associates has developed plans and sign schedules to indicate the intended sign placement locations and methods. Field conditions may require alternative locations and/or location modifications to occur. Conditions may require field determination of alternative attachment method(s) from specified mounts.

The general guidelines below should be followed. The contingency options are provided in order to assist in resolving field conditions.

General Guidelines

- ☐ Installation shall meet all requirements of the American with Disabilities Act (ADA) ICC/ANSI A117.1-200.3
- ☐ Installation shall meet all local, state, federal building and safety codes.
- ☐ All signs installed level and plumb to within 1/64" per foot of length.
- ☐ Surfaces to be clean of dust and debris prior to installation.
- ☐ All packaging and protective coverings to be discarded in designated location.
- ☐ Hanging and Flag signs must remain 24" from sprinkler heads.
- ☐ Signs cannot visually block illuminated EXIT signs. Exit signs must be visually unobstructed from a distance of 100'.
- ☐ Locations may vary up to 1/2" left or right of designation unless field conditions require further modification.
- ☐ Locations unable to be installed in designated areas to be relocated following review by architect, sign planner or designated facility staff or representative
- ☐ Clear silicon adhesive caulk to be added inside tape area at a minimum of 2 locations for signs applied to uneven surfaces, block, concrete or wall covering surfaces. No silicone to be visible around edges of sign.

Field Contingency Placement Options

The guidelines provided below are intended to assist in field condition modifications. Specific locations may require further direction from facility, planner and/or architects.

- ☐ Signs unable to achieve ADA required height location should be placed lower than the 60" centerline designation.
- ☐ Signs unable to achieve ADA standard latch position can be placed at hinge location or be positioned up to 2" from frame. Corner locations can be modified to nearest inside wall at knob side of frame. Tactile signs should NOT be placed on door as an alternative location unless designated on plan or in schedule.
- ☐ Hanging signs that obstruct Exit signs or are near sprinkler heads can be modified to opposite side of door or held further off wall surface.
- ☐ Wall Mounted overhead signs indicated as centered on bulkheads can be modified left or right as required by exit signs and other obstructions.
- ☐ Signs can be relocated with-in requirements of ADA placement to cover or obscure wall damage.

Mounting Methods



METHOD A

Pressure sensitive tape mounting intended for smooth, hard surfaces and sign areas up to 144 square inches. Add clear silicone caulking (not included) for wall covered surfaces and irregular surfaces.



METHOD B

Magnetic mounting for steel surfaces.



METHOD C

Velcro mounting for fabric surfaces. Use with thick fabric only.



METHOD D

Screw-on mounting with expansion hardware. Recommended on all wall mounted signs larger than 144 square inches.



METHOD E

Pin Mount - For use when mounting sign to fabric surfaces (i.e. cubical walls).



METHOD F

Hook - Hook device in clear plastic which "hooks over" top of panel. Automatically locates sign two inches from top of panel. ORDER MUST SPECIFY PANEL MAKE AND THICKNESS.



METHOD G

Freestanding - Integral aluminum desk stand, sign sizes 2", 4", 5" or 6" (height) ONLY.



METHOD G*

Black formed angled acrylic stand for oversized desk signs to be foamed taped to rear of sign



METHOD H

Panel Top - For mounting on top surface of panel for 2" or 4" signs only. Pressure sensitive. Black integral aluminum bracket, sign sizes 2", 4", 5" or 6" (height) ONLY. MAXIMUM SIGN HEIGHT OF 6" IS RECOMMENDED.



METHOD I*

Modified mount for slotted track suspended ceiling grid. 2" white metal brackets suspend sign 1" from ceiling.

METHOD I.1

Ceiling mount for standard suspended ceiling - Connects to 1" ceiling grid system using 2" white metal brackets. Signs appear to be floating below ceiling line. Flange grid ONLY.

METHOD I.5

Ceiling mount for standard suspended ceiling - Connects to 1/2" ceiling grid system using 2" white metal brackets. Signs appear to be floating below ceiling line Flange grid ONLY.



METHOD IN

Rigid Post with integral suspended ceiling grid clip - Sign mount can be specified from 1" to 24" in 1" increments using 1/2" aluminum rod. Specify 1/2" or 1" grid system.



METHOD J

Ceiling Mount (Hanging) - General purpose hanging applications for high or irregular ceilings. Hang lines tie to various points (rafters, beams, duct work, piping etc.) Hanging hardware not included, customer must supply hang line material.



METHOD K

Perpendicular Wall Mount - Mounts sign at 90 degree angle to wall surface with black metal bracket.



METHOD M

Ceiling Mount (Hanging) - White metal flange to secure to fixed ceiling materials (no mounting screws provided with this mount).



METHOD N

Ceiling Mount (Rigid Post) - Sign mounts from ceiling using 1/2" aluminum rod. Specify length of rod.



METHOD O

Fabric mount - Secure to cubicle panel by removing top cap and capturing fabric when re attaching cap. Fabric color is available in black or white. (See Mount Option 10)



METHOD P

Under the Cap Mount - recommended for standard or thin signs. Top cap uses an aluminum bracket as a hook device. Mounts are designed to fit under the top cap of the panel and places the top of the sign flush with the bottom of the top cap.



METHOD Q

Uneven Wall Condition - sign supplied with pressure sensitive tape (see Method A). **Manufacturer:** to provide steel plate (.080) painted Black 704, 3/4" smaller in width and height for corresponding sign. Drill 3/16" countersunk holes (4) 3/4" from edges to center of hole.



METHOD R

Applique Mount - sign/applique supplied with application tape Mounted as specified to glass or other smooth surface



METHOD S

Modified mount for standard suspended ceiling - Connects to 1" ceiling grid system using Hang Ups MTM twist mount fasteners with 3/32" stainless steel cable and 3/32" stainless steel sleeves.



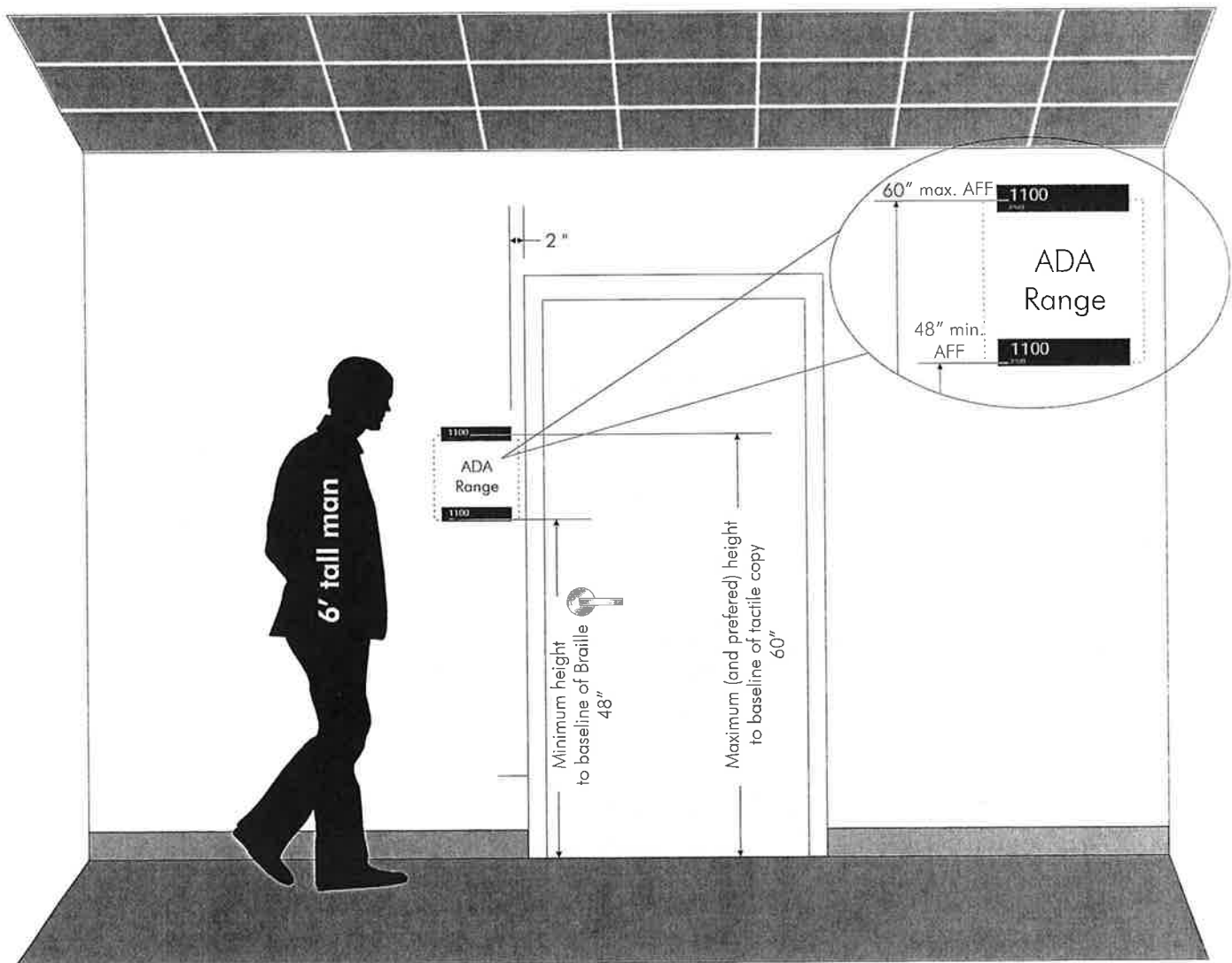
METHOD T

High Powered Magnet Mount for steel panels.

Sign Location 1

Preferred room number sign location for ADA compliance. Mount sign on knob side of door, 2" away from door jamb, 60" (maximum & optimal) to baseline of uppermost tactile text.

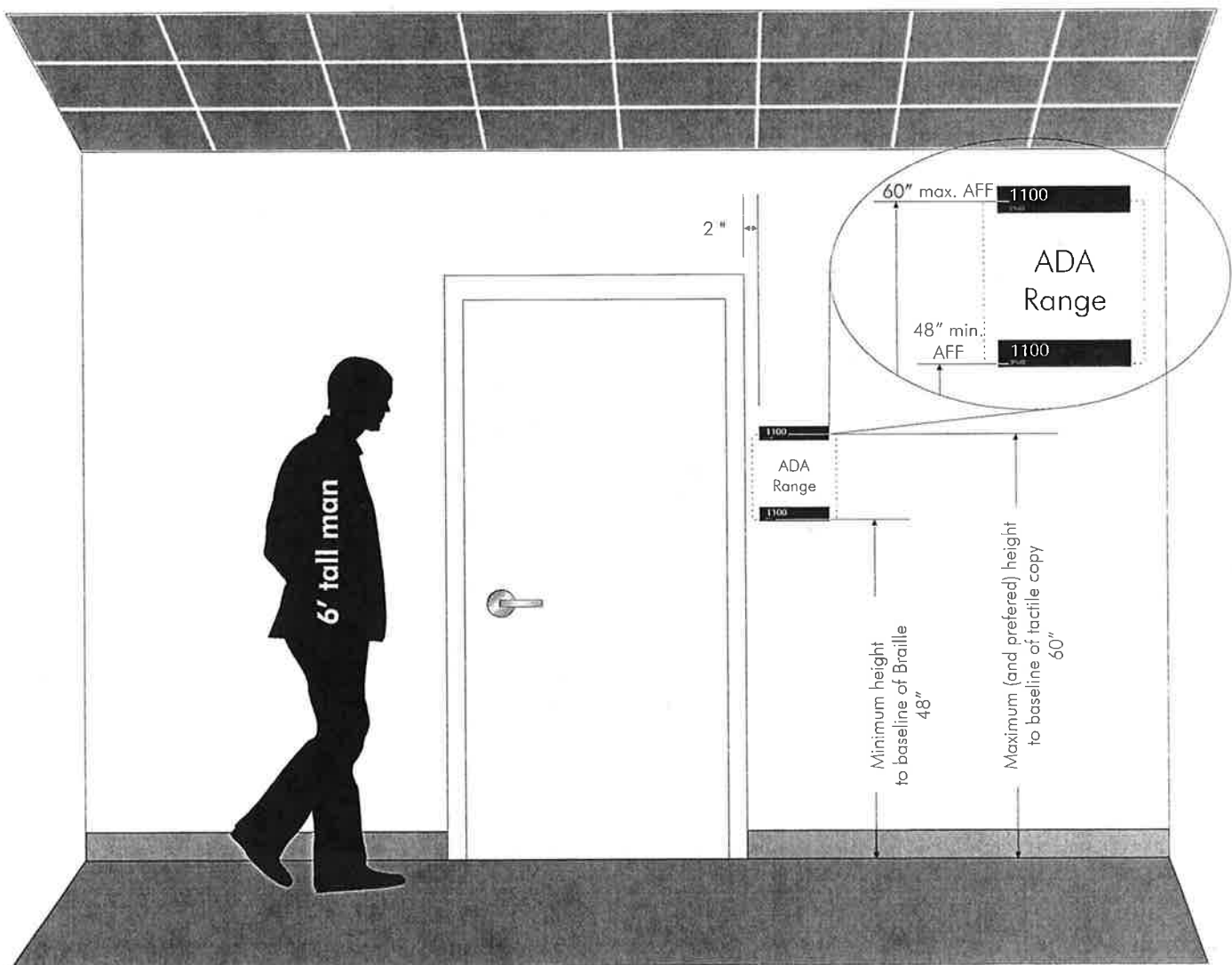
Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).



Sign Location 2

Preferred room number sign location for ADA compliance. Mount sign on hinge side of door, 2" away from door jamb, 60" (maximum & optimal) to baseline of uppermost tactile text. This mount is used when Sign Location 1 cannot be achieved.

Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).



Sign Location 3

Center sign on door or wall area horizontally. Field adjustments may be needed to accommodate existing obstacles. Signs specified with this mount should be installed 60" on center of the sign up from the floor unless otherwise noted. Also use this location when mount locations 1 and 2 cannot be achieved.

Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).



If a sign with tactile copy is in use, see mounting details for Location 1

Special Sign Mounting Condition:

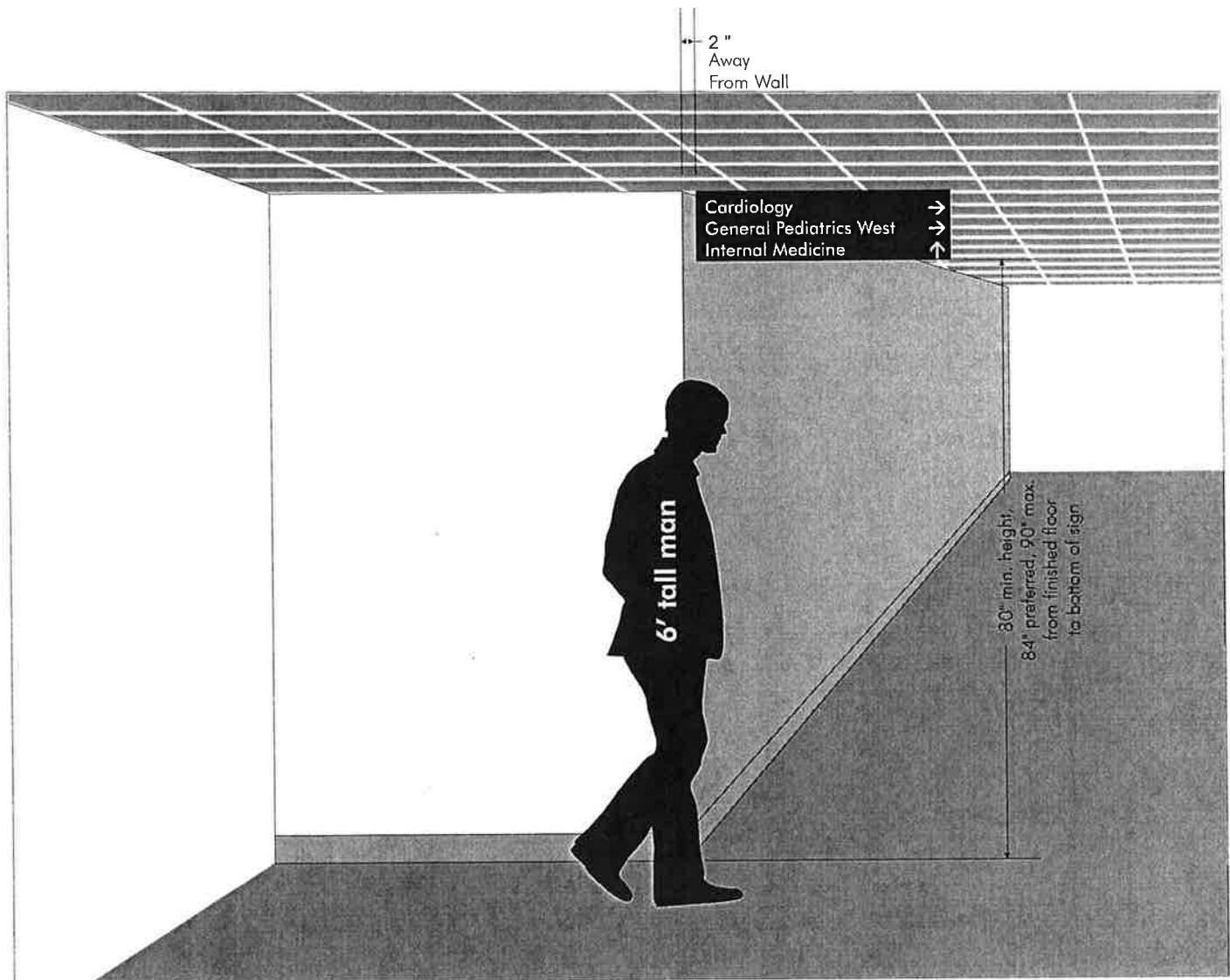
Exact mounting instructions will be called out in the notes column of the Interior Sign Message Schedule.

Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each signs' mounting hardware (see "Mounting Methods" page for description of each mount letter code).

Sign Location 5

Sign Mounting Condition for Two-Sided Overhead Hanging Signs: See notes column of the Interior Sign Message Schedule for additional mounting information.

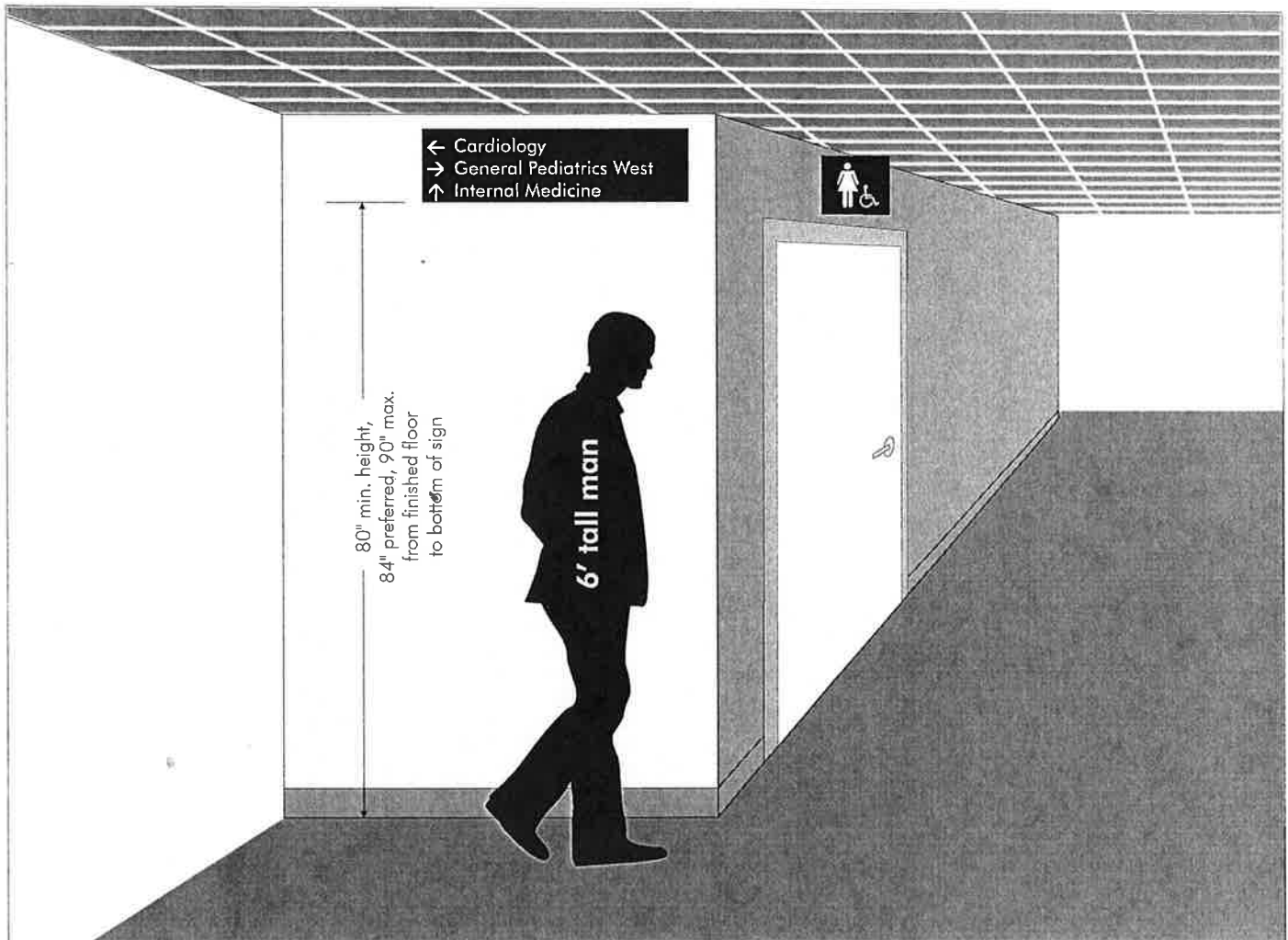
Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each signs' mounting hardware (see "Mounting Methods" page for description of each mount letter code).



Sign Location 6

Sign Mounting Condition for Wall Mounted Overhead Signs: See notes column of the Interior Sign Message Schedule for additional mounting information.

Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).

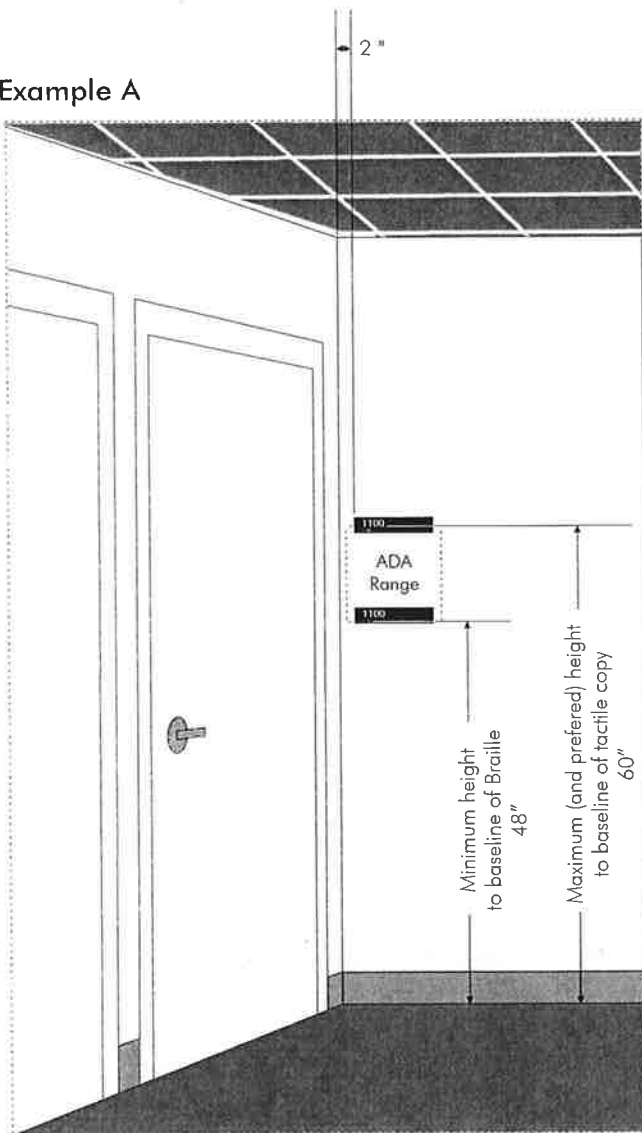


Sign Location 7

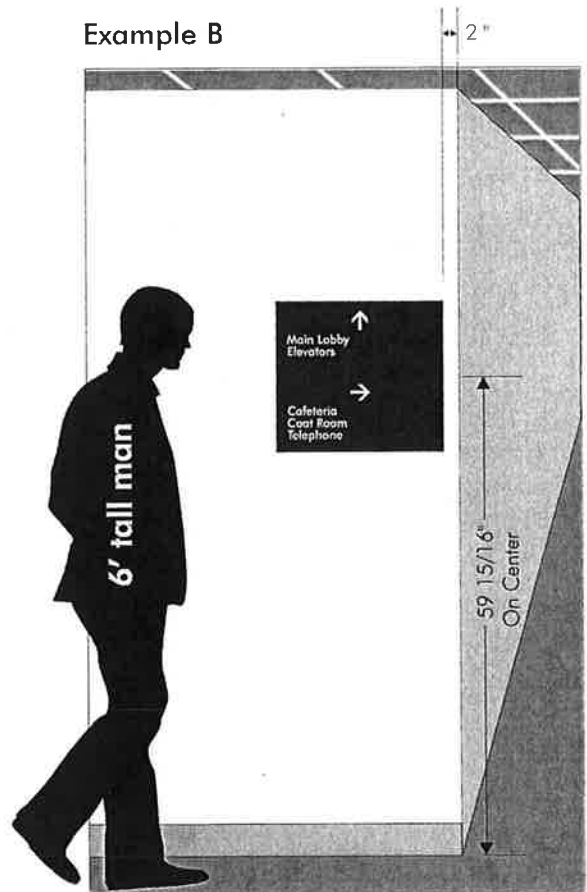
Mount sign on wall 2" away from corners, 60" (maximum & optimal) to baseline of uppermost tactile text.

Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each signs' mounting hardware (see "Mounting Methods" page for description of each mount letter code)

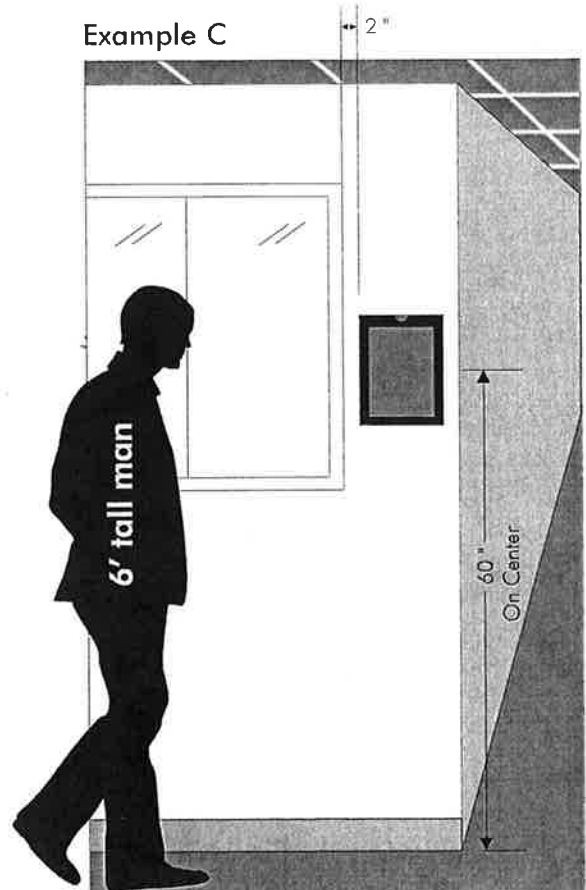
Example A



Example B



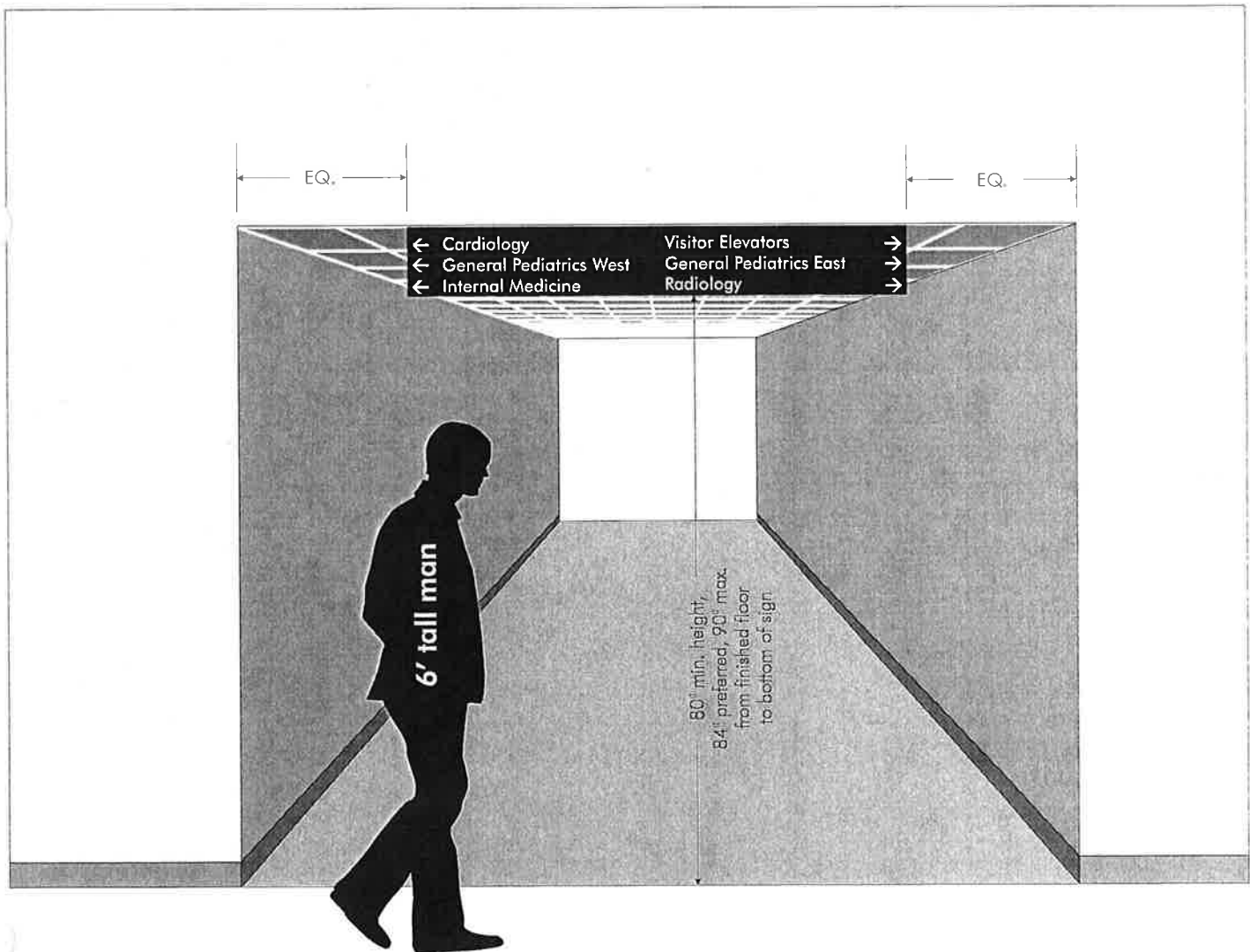
Example C



Sign Location 8

Sign Mounting Condition for Two-Sided Overhead Hanging Signs: See notes column of the Interior Sign Message Schedule for additional mounting information.

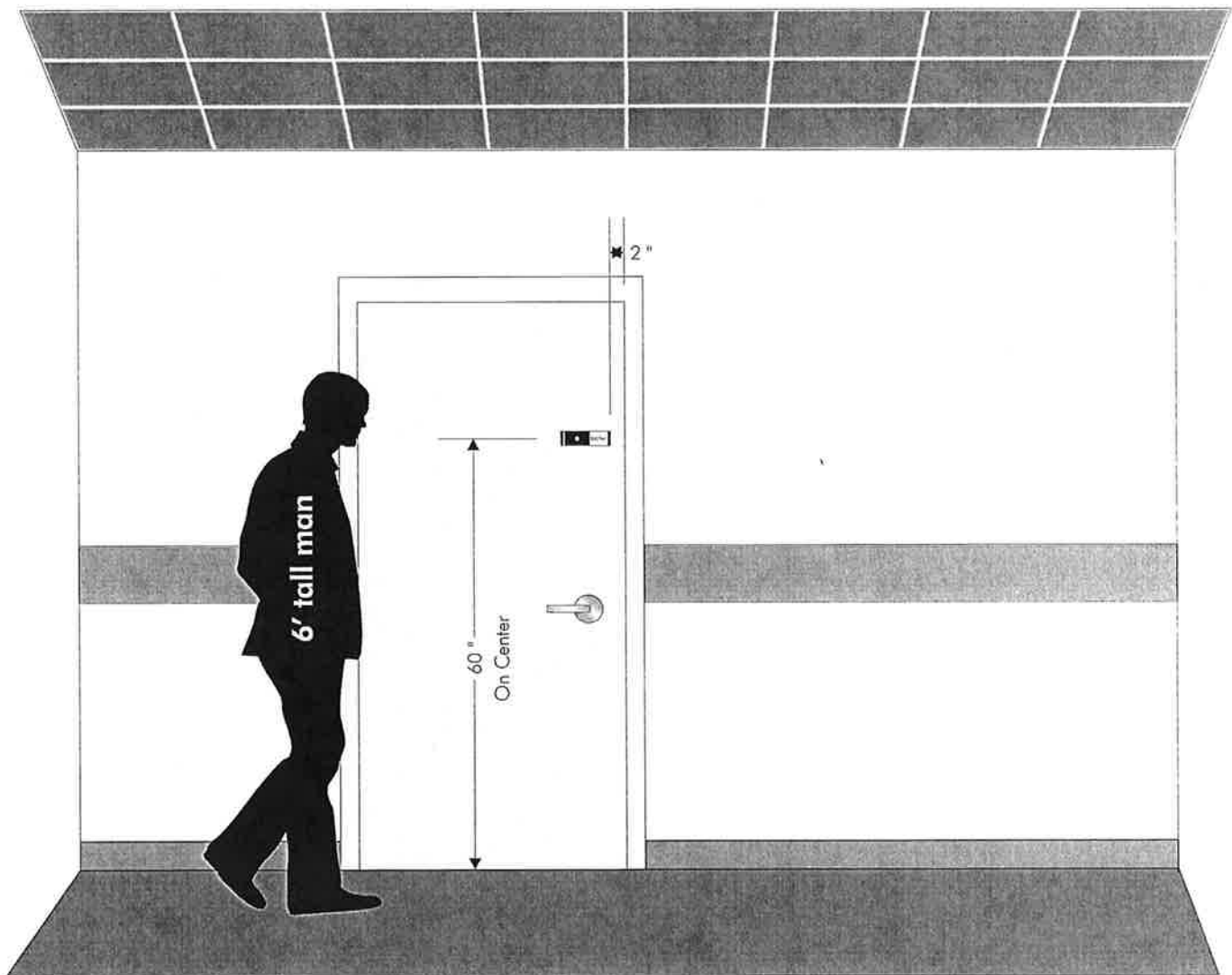
Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).



Sign Location 9

Mount sign on knob side of door, 2" in from edge of door. Field adjustments may be needed to accommodate existing obstacles. Signs specified with this mount should be installed 60" on center of the sign up from the floor unless otherwise noted.

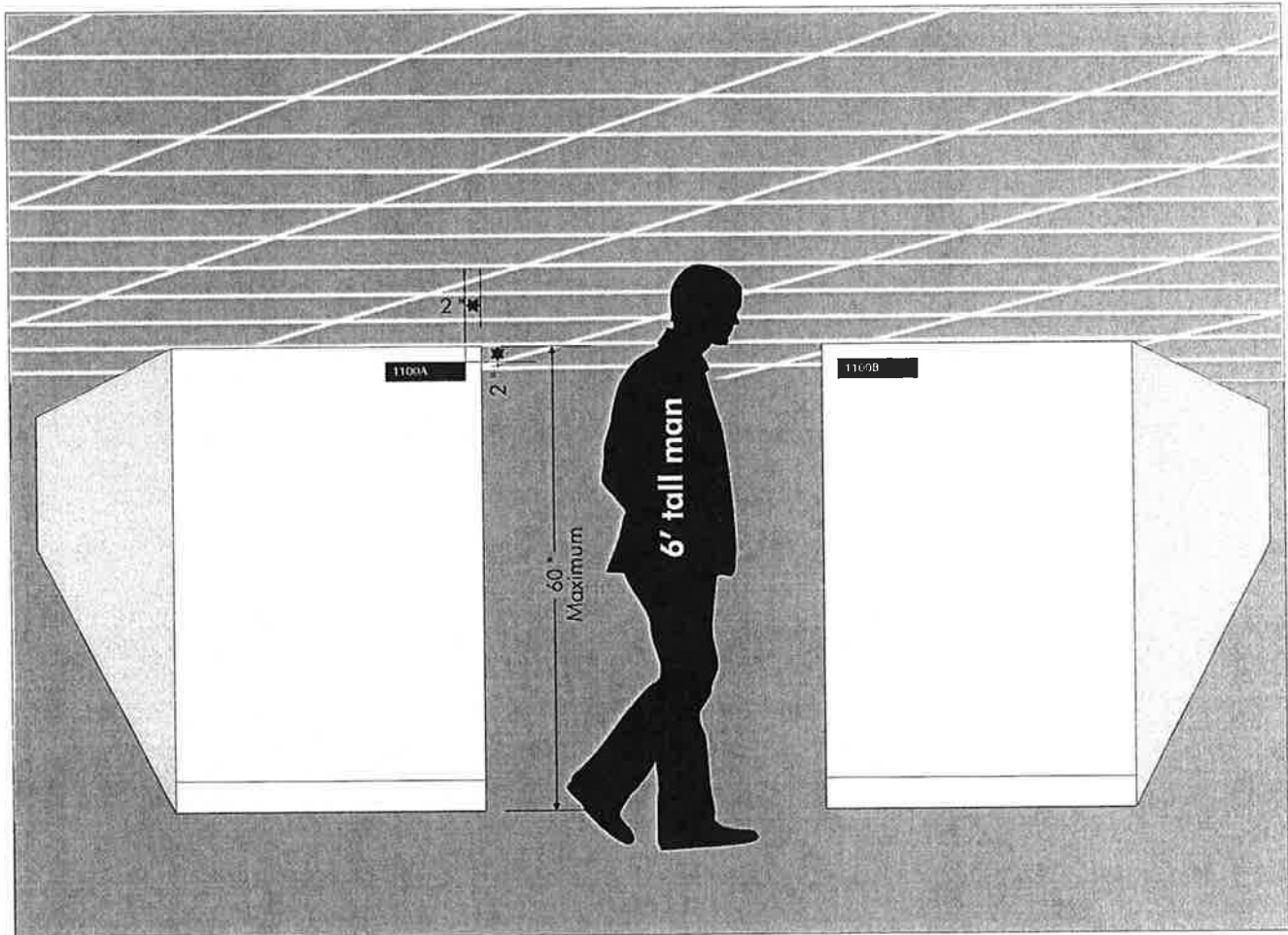
Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).



Sign Location 10

Mount sign on cubicle 2" away from corners, 60" maximum height (cubicle heights vary).

Mount location numbers appear in the "Mt." (Mount) column of each message schedule along with mount letters that specify each sign's mounting hardware (see "Mounting Methods" page for description of each mount letter code).



TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 9"h x 9"w

PART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

Visual Example for demonstration only
Not To Scale

PART B

Specs: Window insert carrier w/lens & paper insert installed
Size: 2"h x 9"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: Lines 1 & 2
Size: 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Note: Paper insert file 2x9A to be provided to client by ASA

PART C

Specs: Window insert carrier w/lens & paper insert installed
Size: 4"h x 9"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: VA Logo
Size: 3 1/2" centered
Font: NA
Color: 7% black laser print
Lines 3-5
Size: 11/16" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Note: Paper insert file 4x9A to be provided to client by ASA

PART D

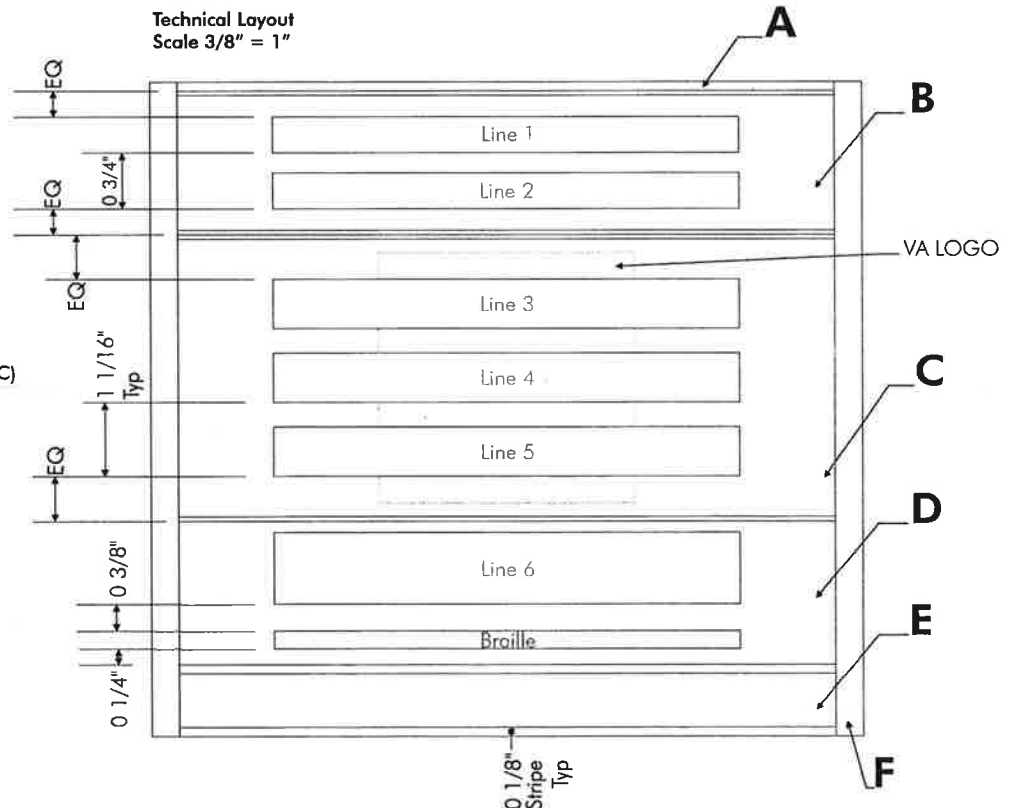
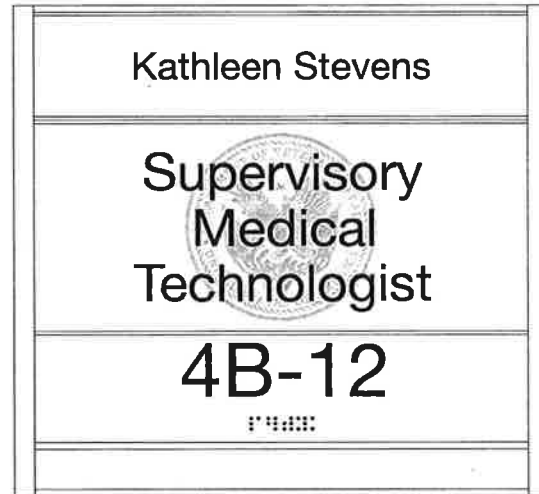
Specs: Integral ADA insert w/tactile copy and braille
Size: 2"h x 9"w
Color: White 208
Copy: Line 6
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Black 204

PART E

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART F (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 9" + h
Color: White 208



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

A	B	C	D	E	F	Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 9"h x 9"w

Visual Example for demonstration only
Not To Scale

PART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

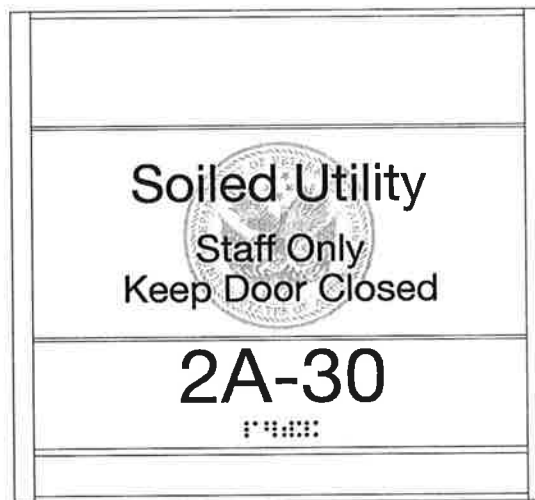
PART B

Specs: ABS insert
Size: 2"h x 9"w
Color: White 208

PART C

Specs: Window insert carrier w/lens & paper insert installed
Size: 4"h x 9"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: VA Logo
Size: 3 1/2" centered
Font: NA
Color: 7% black laser print
Line 1
Size: 1 1/16" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Lines 2 & 3
Size: 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy

Note: Paper insert file 4x9B to be provided to client by ASA



PART D

Specs: Integral ADA insert w/tactile copy and braille
Size: 2"h x 9"w
Color: White 208
Copy: Line 4
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Black 204

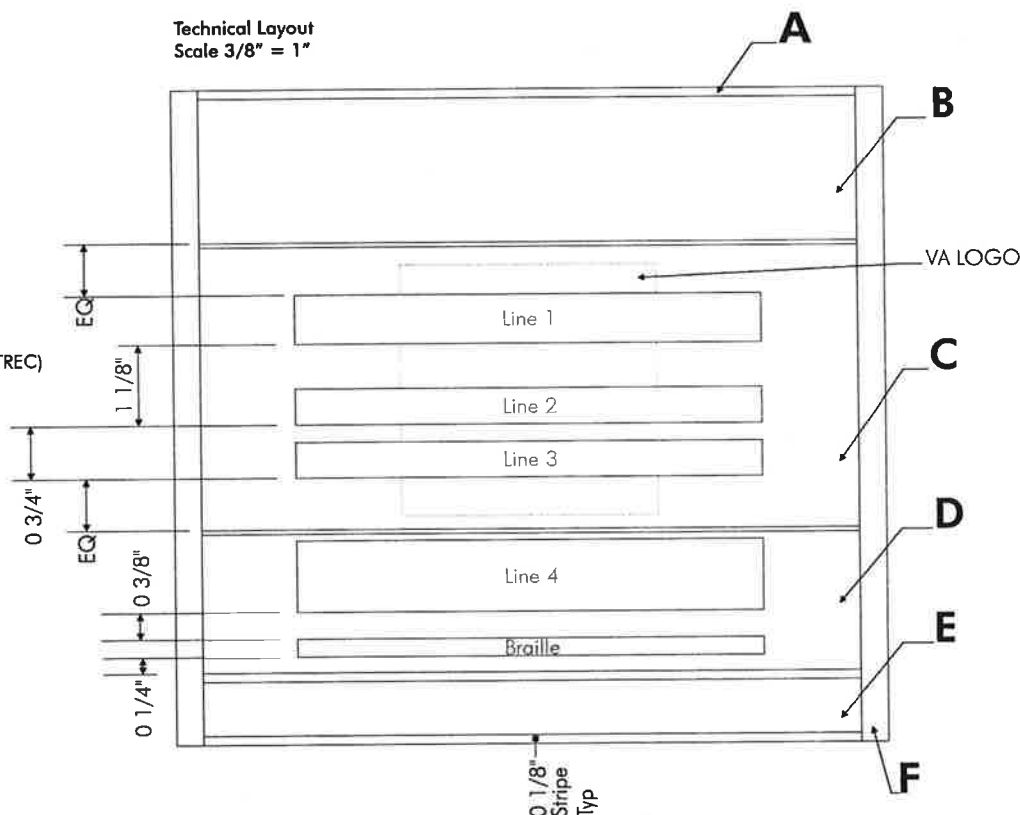
Technical Layout
Scale 3/8" = 1"

PART E

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART F (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 9" + h
Color: White 208



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity	Entire Sign
A		

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 9"h x 9"w

Visual Example for demonstration only
Not To Scale

PART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

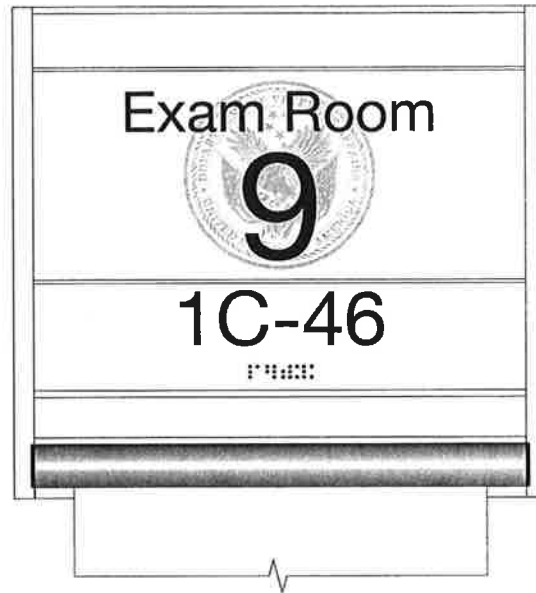
PART B

Specs: ABS insert
Size: 1"h x 9"w
Color: White 208

PART C

Specs: Window insert carrier w/lens & paper insert installed
Size: 4"h x 9"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: VA Logo
Size: 3 1/2" centered
Font: NA
Color: 7% black laser print
Line 1
Size: 3/4" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Line 2
Size: 2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy

Note: Paper insert file 4x9C to be provided to client by ASA



PART D

Specs: Integral ADA insert w/tactile copy and braille
Size: 2"h x 9"w
Color: White 208
Copy: Line 3
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Black 204

PART E

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

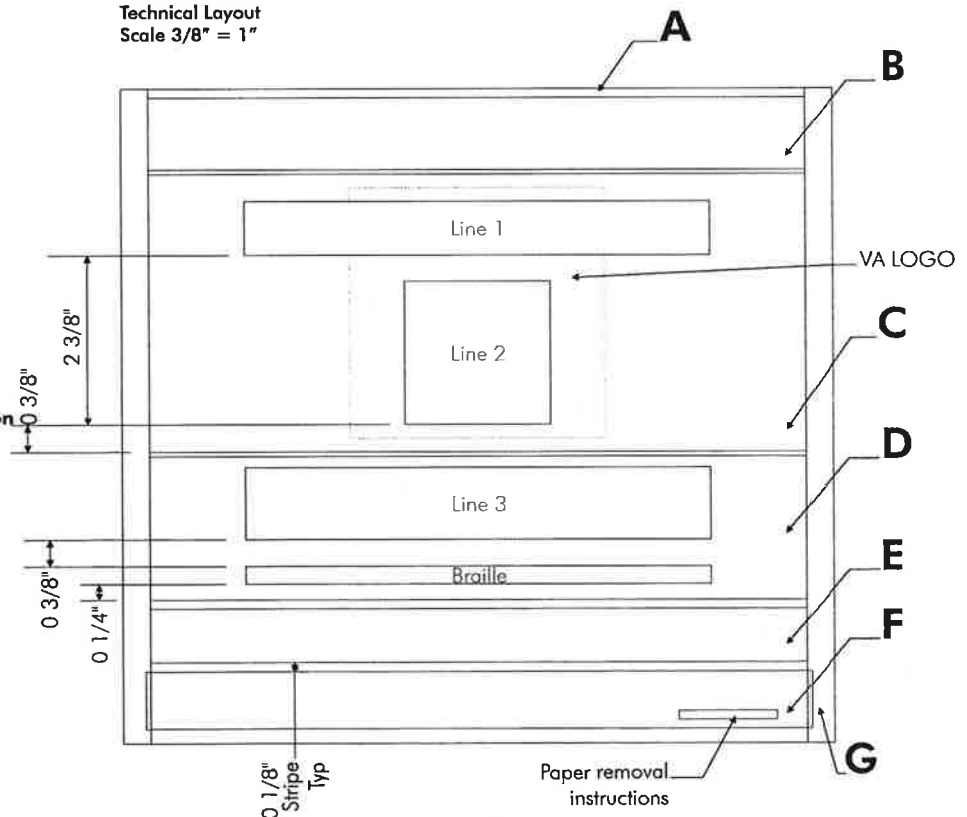
PART F

Specs: Smart Strip w/ paper removal instruction
Size: 1"h x 7"w
Color: Anodized Satin 101 (Strip & Carrier)
Standard Black (End caps)
Note: Surface applied / etched paper removal instruction
TBD by manufacturer

PART G (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 9" + h
Color: White 208

Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	
F	
G	

Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

--

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
Associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 10"h x 9"w

Visual Example for demonstration only
Not To Scale

PART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

PART B

Specs: Subsurface insert w/subsurface copy
Size: 6"h x 9"w
Color: White 208
Copy: Line 1
Size: 3/8" centered
Font: Helvetica Regular (HRC)
Color: Black 204
Line 2
Size: 4 1/4" centered
Font: N/A
Color: Black 204



PART C

Specs: Integral ADA insert w/tactile copy and braille
Size: 3"h x 9"w
Color: White 208
Copy: Lines 3 & 4
Size: 3/4" centered as shown
Font: Helvetica Regular (HRC)
Color: Black 204

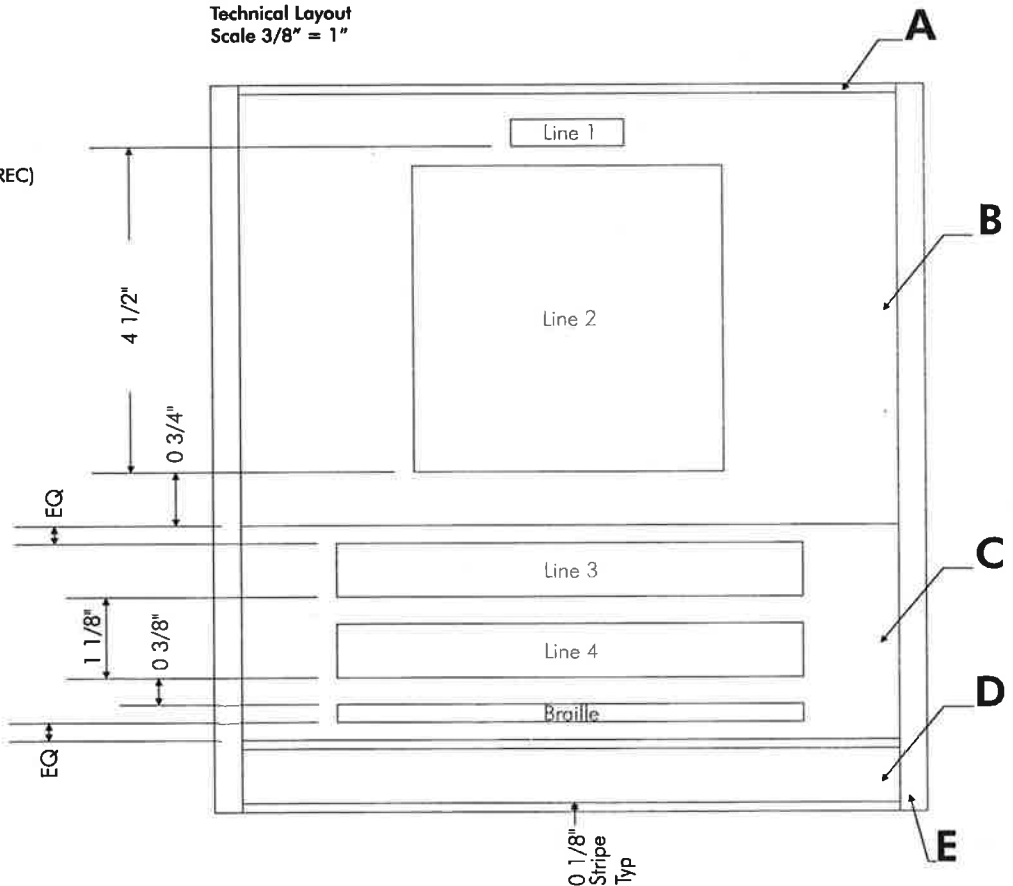
PART D

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

Technical Layout
Scale 3/8" = 1"

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 10"+h
Color: White 208



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities
Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Mounting
Indicate mounting option in box below, if applicable.

Copy
Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

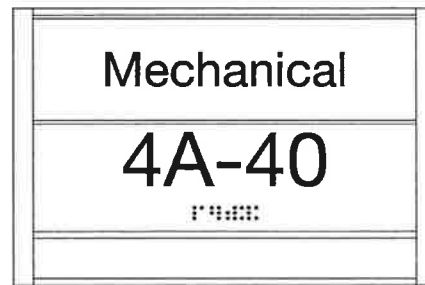
412.563.5657
signplanning.com
All Rights Reserved

PRODUCT DESCRIPTION

Visual Example for demonstration only
Not To Scale

Specs: Top accent trim
Size: 7"w
Color: Bronze 156

Specs: Window insert carrier w/lens & paper insert installed
Size: 2"h x 7"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: Line 1
Size: 5/8" centered
Font: Helvetica Regular (HRC)
Color: Black laser copy
Note: Paper insert file 2x7A to be provided to client by ASA



Specs: Integral ADA insert w/tactile copy and braille
Size: 2" h x 7" w
Color: White 208
Copy: Line 2
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Black 204

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1" h x 7" w (Insert)
1/8" h x 7" w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 5"+h
Color: White 208

Technical Layout
Scale $3/8" = 1"$

The diagram illustrates the layout of a Braille page with the following components and dimensions:

- Line 1**: The first line of Braille.
- Line 2**: The second line of Braille.
- Braille**: The Braille text area.
- Dimensions**:
 - $0.3/8"$: The height of the Braille lines.
 - $0.1/4"$: The height of the Braille lines.
 - $0.1/8"$: The height of the Braille lines.
- Labels**:
 - A**: Points to the top margin.
 - B**: Points to the right margin.
 - C**: Points to the bottom margin.
 - D**: Points to the left margin.
 - E**: Points to the bottom margin.

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 5"h x 9"w

Visual Example for demonstration only
Not To Scale

PART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

PART B

Specs: Window insert carrier w/lens & paper insert installed
Size: 2"h x 9"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: Lines 1 & 2
Size: 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Note: Paper insert file 2x9A to be provided to client by ASA



PART C

Specs: Integral ADA insert w/tactile copy and braille
Size: 2"h x 9"w
Color: White 208
Copy: Line 3
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Black 204

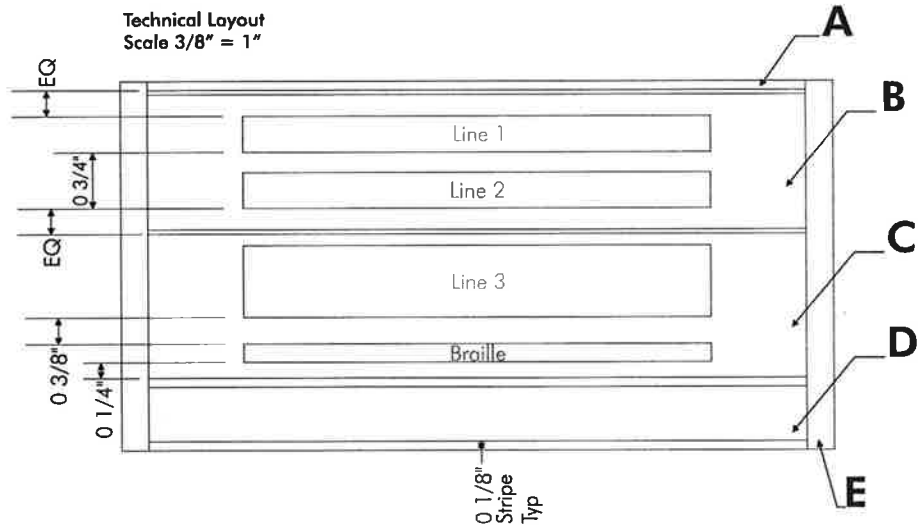
PART D

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 5"+h
Color: White 208

Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign (12"h x 12"), with custom elements,
approx 16"h x 14"w

PART A

Specs: 1/2" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART B

Specs: 1/8" thick acrylic plaque w/D2S logo
Size: TBD
Color: White 208
Copy: Line 1
Size: 1 3/4" centered
Font: N/A
Color: Match Black Matte 704

PART C (quantity 2)

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 12"w (Insert)
1/8"h x 12"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART D

Specs: ABS insert w/D2S copy
Size: 8"h x 12"w
Color: White 208
Copy: Lines 2 & 3
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Match Black 204
Line 4
Size: 2" centered
Font: N/A
Color: See Symbols Page for Colors

PART E

Specs: Integral ADA insert w/tactile copy and braille
Size: 2"h x 12"w
Color: White 208
Copy: Line 5
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Black 204

PART F

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 12"h
Color: White 208

PART G

Specs: 3/4" thick Oak bar
Size: 1/2"h x 13 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to bottom rail of thin series sign
w/concealed screws

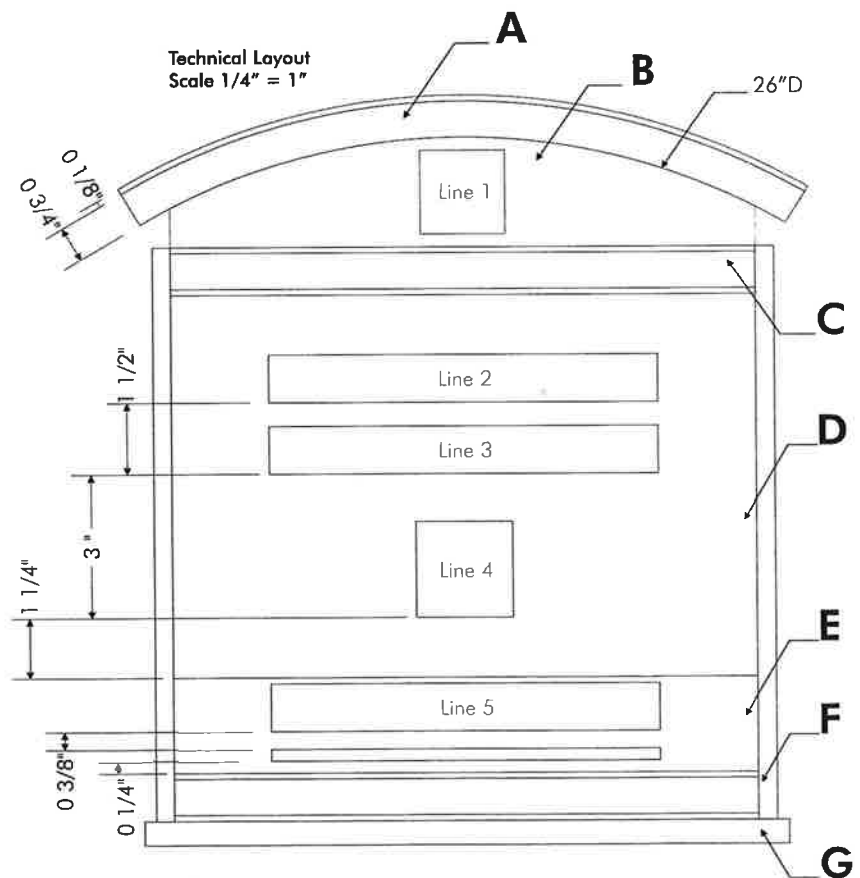
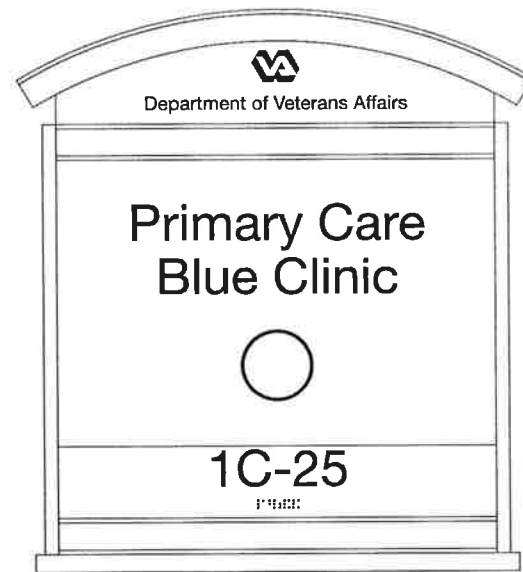
PART H (not shown)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts A, B & thin series sign
Locate two strips vertically in between
pre-drilled screw holes

NOTES

- See Sign Fabrication Sheet on Section 9 of Manual for assembly details

Visual Example for demonstration only
Not To Scale



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities
Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	
F	
G	

Mounting
Indicate mounting
option in box below,
if applicable.

Copy
Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

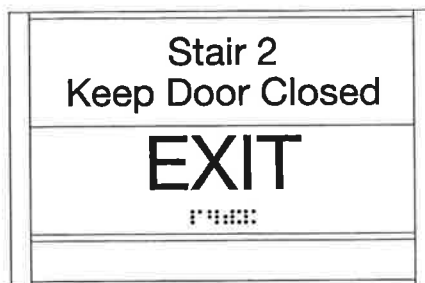
412.563.5657
signplanning.com
All Rights Reserved

PRODUCT DESCRIPTION

Visual Example for demonstration only
Not To Scale

Specs: Top accent trim
Size: 7"w
Color: Bronze 156

Specs: ABS insert w/D25 copy
Size: 2"h x 7"w
Color: White 208
Copy: Lines 1 & 2
Size: 1/2" centered
Font: Helvetica Regular (HRC)
Color: Match Black 204



Specs: Integral ADA insert w/tactile copy and braille
Size: 2" h x 7" w
Color: White 208
Copy: Line 3
Size: 1" centered as shown
Font: Helvetica Regular (HRC)
Color: Black 204

Specs: Aluminum insert w/painted top/bottom stripes
Size: 1" h x 7" w (Insert)
1/8" h x 7" w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 5"+h
Color: White 208

Technical Layout
Scale 3/8" = 1"

EQ

0 3/4"

EQ

0 3/8"

0 3/16"

Line 1

Line 2

Line 3

Braille

0 1/8" Stripe Typ

A

B

C

D

E

412.563.5657
signplanning.com
All Rights Reserved

PRODUCT DESCRIPTION

PART A

Size: 7"h x 7"w

Color: White 208

Copy: Match Cardinal Red 236

Note: Artwork to be provided to manufacturer by ASA

Blunt corners of plaque with 1/32" radius corners,
no sharp edges

R	Rescue	Rescue Anyone in Danger
A	Alarm	Pull Alarm Call 3298
C	Confine	Close All Doors
E	Extinguish	Fight Fire

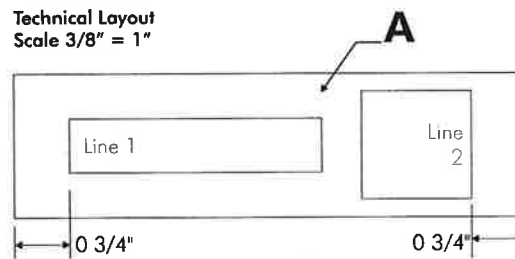
RACE

Artwork/Layout to be developed
at time of fabrication by ASA

412.563.5657
signplanning.com
All Rights Reserved

PRODUCT DESCRIPTION

PART A



412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (28"h x 20"), with custom elements,
approx 29"h x 22"w

PART A

Specs: 1" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART B

Specs: 3/8" thick acrylic plaque
Size: TBD
Color: White 208
Note: Route shape of Part C with 1/16" inset to receive Part C

PART C

Specs: 1/4" thick router cut acrylic letter
Copy: Line 1
Size: 2 3/4" centered
Font: Garamond No4 CyrTCYlig or equal
Color: Black Matte 704
Note: Permanently adhere into Part B pre-routed shape

PART D (quantity 13)*

Specs: U-Do insert w/reverse D2S copy on lens
Size: 2"h x 20"w (Carrier)
Color: White 208 (Carrier)
Copy: Lines 2-14 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 2-14 (Text)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between
symbol & text is to match 50% of letter height

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 28"h
Color: White 208

PART F (quantity 2)

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART G

Specs: 3/4" thick Oak bar
Size: 1/2"h x 21 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to bottom rail of standard series sign
w/concealed screws

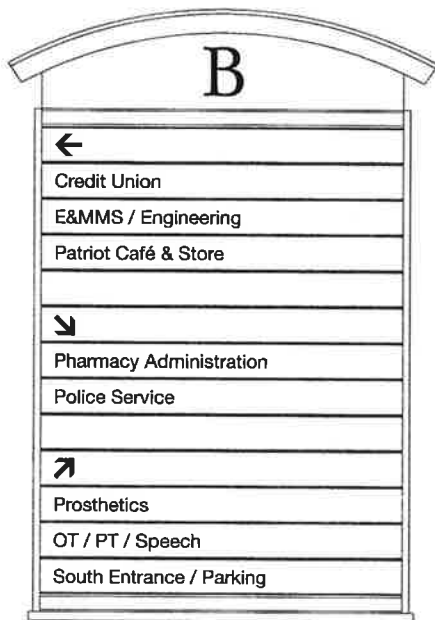
PART H (not shown)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts A, B & standard series sign
Locate two strips vertically in between pre-drilled screw holes

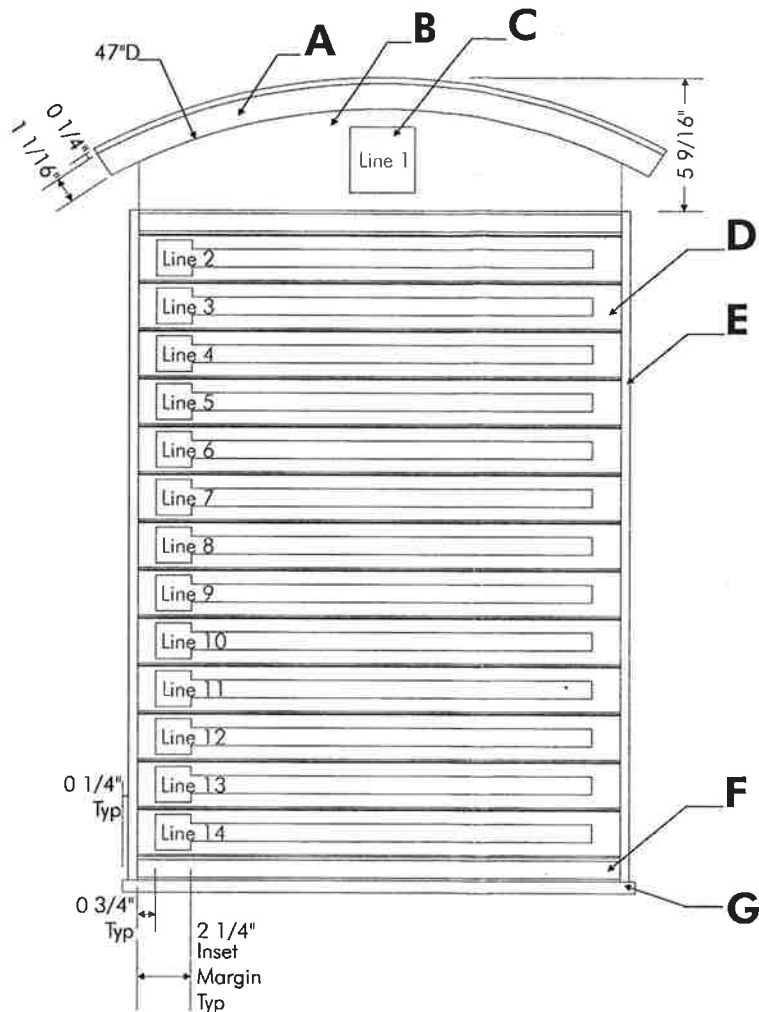
NOTES

- *For Part D, Facility may request option of window insert w/lens & paper insert
Paper insert file 2x20A to be provided to client by ASA
Will require new lens & Standard White (LP-W) paper w/black laser copy
- See Sign Fabrication Sheet on Section 9 of Manual for assembly details

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities
Write desired part letter &
quantity in box(es) below.

A

Mounting
Indicate mounting
option in box below,
if applicable.

Copy
Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems
first to lasting impressions
800.777.4310
290signs.com

Architectural
SIGN
associates
412.563.5657
signplanning.com
All Rights Reserved

Fold on this line
For faxing

For replacement part / additional sign ordering - See Page 1 of this document for order form.

2/90
Sign Systems
first to lasting impressions
800.777.4310
290signs.com

Architectural
SIGN
associates
412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (13"h x 20"), with custom elements, approx 20"h x 22"w

PART A

Specs: 1" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART B

Specs: 3/8" thick acrylic plaque
Size: TBD
Color: White 208
Note: Route shape of Part C with 1/16" inset to receive Part C

PART C

Specs: 1/4" thick router cut acrylic letter
Size: TBD
Color: Black Matte 704
Note: Permanently adhere into Part B pre-routed shape

PART D (quantity 4)*

Specs: U-Do insert w/reverse D2S copy on lens
Size: 2"h x 20"w (Carrier)
Color: White 208 (Carrier)
Copy: Lines 2-5 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 2-5 (Text)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between symbol & text is to match 50% of letter height

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 13"h
Color: White 208

PART F (quantity 2)

Specs: Aluminum insert w/painted top/bottom stripe and D2S copy
Size: 2"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Copy: Lines 6 & 8 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 7 & 9 (Text & Symbols)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between symbol & text is to match 50% of letter height
Horizontal grain on insert

PART G

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART H

Specs: 3/4" thick Oak bar
Size: 1/2"h x 21 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to bottom rail of standard series sign w/concealed screws

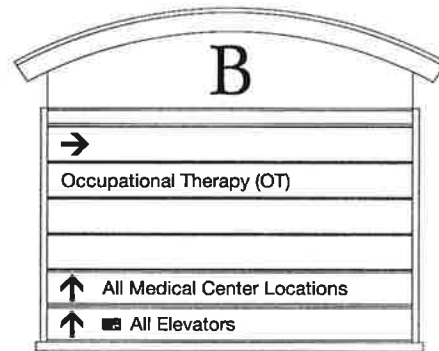
PART J (not shown)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts A, B & standard series sign
Locate two strips vertically in between pre-drilled screw holes

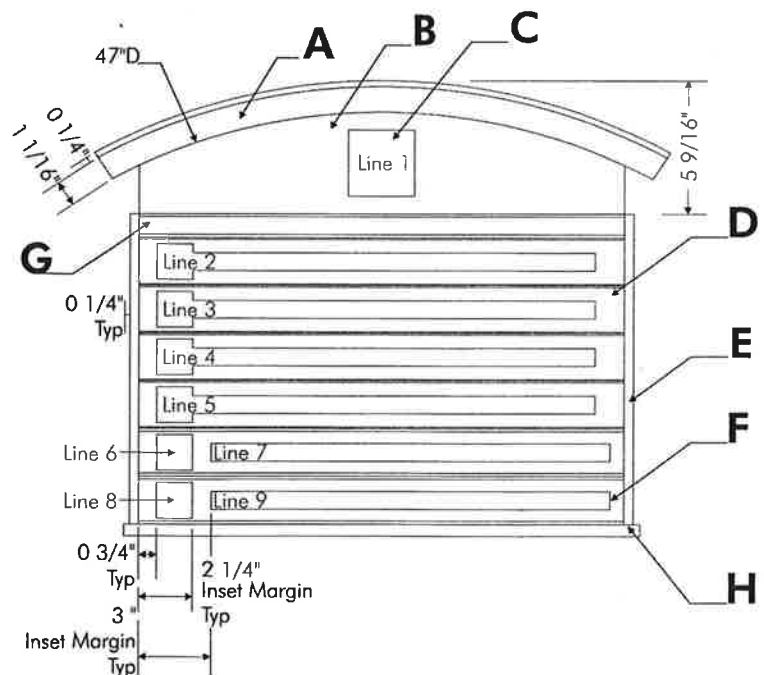
NOTES

- *For Part D, Facility may request option of window insert w/lens & paper insert
Paper insert file 2x20A to be provided to client by ASA
Will require new lens & Standard White (LP-W) paper w/black laser copy
- See Sign Fabrication Sheet on Section 9 of Manual for assembly details

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	
F	
G	
H	

Mounting

Indicate mounting option in box below, if applicable.

Option

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (21" h x 20" w), with custom elements,
approx 29" h x 22" w

PART A

Specs: 1" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART B

Specs: 3/8" thick acrylic plaque
Size: TBD
Color: White 208
Note: Route shape of Part C with 1/16" inset to receive Part C

PART C

Specs: 1/4" thick router cut acrylic letter
Copy: Line 1
Size: 2 3/4" centered
Font: Garamond No4 CyrTCY Lig or equal
Color: Black Matte 704
Note: Permanently adhere into Part B pre-routed shape

PART D (quantity 8)*

Specs: U-Do insert w/reverse D2S copy on lens
Size: 2" h x 20" w (Carrier)
Color: White 208 (Carrier)
Copy: Lines 2-9 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 2-9 (Text)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between
symbol & text is to match 50% of letter height

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 21" h
Color: White 208

PART F (quantity 2)

Specs: Aluminum insert w/painted top/bottom stripe and D2S copy
Size: 2" h x 20" w (Insert)
1/8" h x 20" w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Copy: Lines 10 & 12 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 11 & 13 (Text & Symbols)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between
symbol & text is to match 50% of letter height
Horizontal grain on insert

PART G

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1" h x 20" w (Insert)
1/8" h x 20" w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART H

Specs: 3/4" thick Oak bar
Size: 1/2" h x 21 1/4" w
Color: Solid White Stain w/clear coat
Note: Attach to bottom rail of standard series sign
w/concealed screws

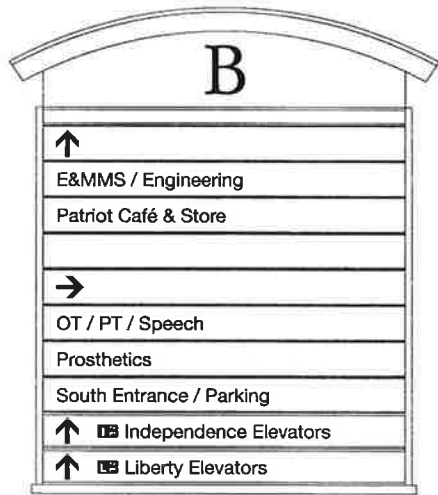
PART J (not shown)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts A, B & standard series sign
Locate two strips vertically in between pre-drilled screw holes

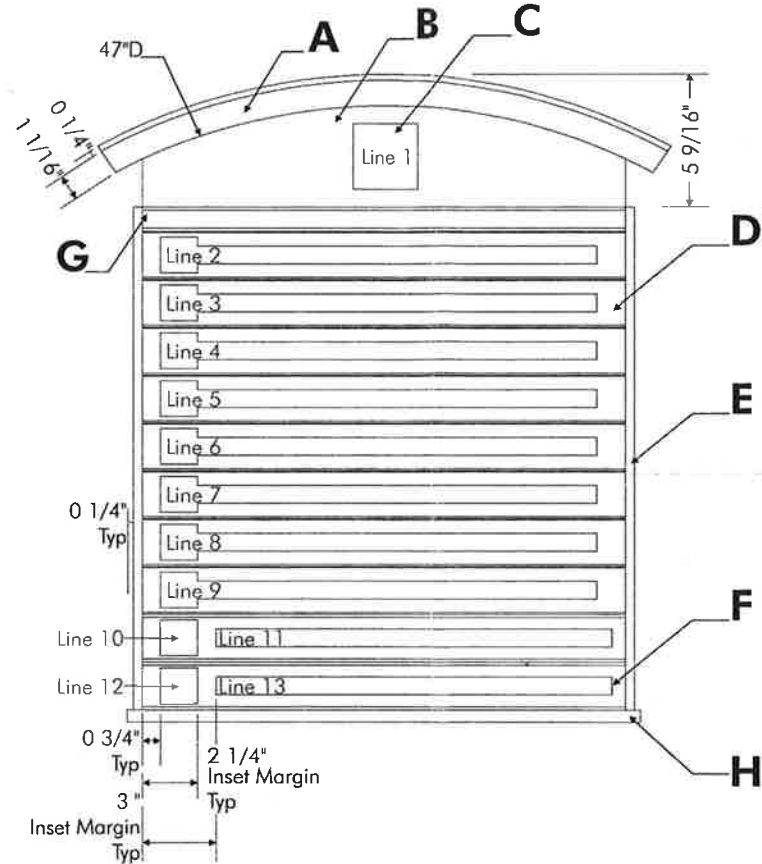
NOTES

- *For Part D, Facility may request option of window insert w/lens & paper insert
Paper insert file 2x20A to be provided to client by ASA
Will require new lens & Standard White (LP-W) paper w/black laser copy
- See Sign Fabrication Sheet on Section 9 of Manual for assembly details

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original
sign type drawing in manual.
Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities
Write desired part letter &
quantity in box(es) below.
A

Mounting
Indicate mounting
option in box below,
if applicable.

Copy
Print copy in numbered boxes
on drawing above, if applicable.
Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems
first to lasting impressions™
800.777.4310
290signs.com

Architectural
SIGN
associates
412.563.5657
signplanning.com
All Rights Reserved

Fold on this line
For faxing

For replacement part / additional sign ordering - See Page 1 of this document for order form.

2/90
Sign Systems
first to lasting impressions™
800.777.4310
290signs.com

Architectural
SIGN
associates
412.563.5657
signplanning.com
All Rights Reserved

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (29"h x 20"), with custom elements,
approx 35"h x 22"w

PART A

Specs: 1" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART B

Specs: 3/8" thick acrylic plaque
Size: TBD
Color: White 208
Note: Route shape of Part C with 1/16" inset to receive Part C

PART C

Specs: 1/4" thick router cut acrylic letter
Copy: Line 1
Size: 2 3/4" centered
Font: Garamond No4 CyrTCYlig or equal
Color: Black Matte 704
Note: Permanently adhere into Part B pre-routed shape

PART D (quantity 12)*

Specs: U-Do insert w/reverse D2S copy on lens
Size: 2"h x 20"w (Carrier)
Color: White 208 (Carrier)
Copy: Lines 2-13 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 2-13 (Text)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between
symbol & text is to match 50% of letter height

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 29"h
Color: White 208

PART F (quantity 2)

Specs: Aluminum insert w/painted top/bottom stripe and D2S copy
Size: 2"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Copy: Lines 14 & 16 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 15 & 17 (Text & Symbols)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between
symbol & text is to match 50% of letter height
Horizontal grain on insert

PART G

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART H

Specs: 3/4" thick Oak bar
Size: 1/2"h x 21 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to bottom rail of standard series sign
w/concealed screws

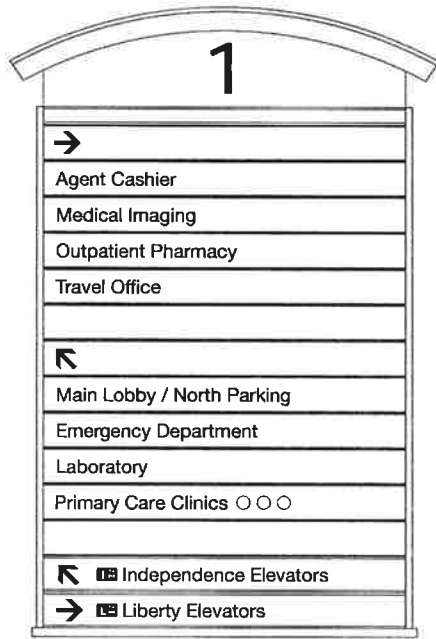
PART J (not shown)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts A, B & standard series sign
Locate two strips vertically in between pre-drilled screw holes

NOTES

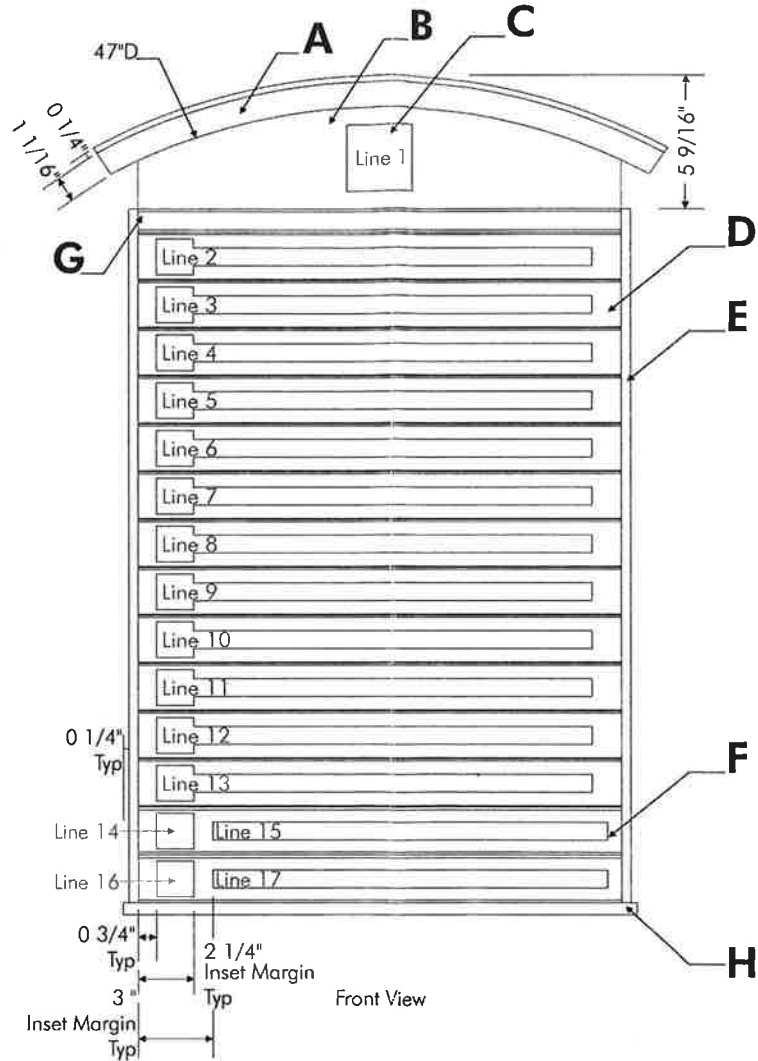
- *For Part D, Facility may request option of window insert w/lens & paper insert
Paper insert file 2x20A to be provided to client by ASA
Will require new lens & Standard White (LP-W) paper w/black laser copy
- See Sign Fabrication Sheet on Section 9 of Manual for assembly details
- See Symbols Page and Message Schedules for Circle Symbols colors

Visual Example for demonstration only
Not To Scale



Fold on this line
For faxing

Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out Make a copy & replace original sign type drawing in manual. Refer to "How to Order New Signs" in Section 1 of manual.	Parts & Quantities Write desired part letter & quantity in box(es) below. A	Mounting Indicate mounting option in box below, if applicable.	Copy Print copy in numbered boxes on drawing above, if applicable. Pay attention to capitalization, spelling and placement.	2/90 Sign Systems first to lasting impressions® 800.777.4310 290signs.com	Architectural SIGN associates 412.563.5657 signplanning.com All Rights Reserved
---	---	--	--	--	---

Fold on this line
For faxing

For replacement part / additional sign ordering - See Page 1 of this document for order form.

2/90 Sign Systems first to lasting impressions® 800.777.4310 290signs.com	Architectural SIGN associates 412.563.5657 signplanning.com All Rights Reserved
--	---

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (29"h x 20"), with custom elements, approx 35"h x 22"w

PART A

Specs: 1" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART B

Specs: 3/8" thick acrylic plaque
Size: TBD
Color: White 208
Note: Route shape of Part C with 1/16" inset to receive Part C

PART C

Specs: 1/4" thick router cut acrylic letter
Copy: Line 1
Size: 2 3/4" centered
Font: Garamond No4 CyrTCYlig or equal
Color: Black Matte 704
Note: Permanently adhere into Part B pre-routed shape

PART D (quantity 11)*

Specs: U-Do insert w/reverse D2S copy on lens
Size: 2"h x 20"w (Carrier)
Color: White 208 (Carrier)
Copy: Lines 2-12 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 2-12 (Text)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between symbol & text is to match 50% of letter height

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 29"h
Color: White 208

PART F (quantity 3)

Specs: Aluminum insert w/painted top/bottom stripe and D2S copy
Size: 2"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Copy: Lines 13, 15 & 17 (Arrows)
Size: 1 1/2" left justified
Font: N/A
Color: Match Black 204
Lines 14, 16 & 18 (Text & Symbols)
Size: 3/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Arrows are measured tip to tail
If symbol precedes or follows text, spacing between symbol & text is to match 50% of letter height
Horizontal grain on insert

PART G

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 20"w (Insert)
1/8"h x 20"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART H

Specs: 3/4" thick Oak bar
Size: 1/2"h x 21 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to bottom rail of standard series sign w/concealed screws

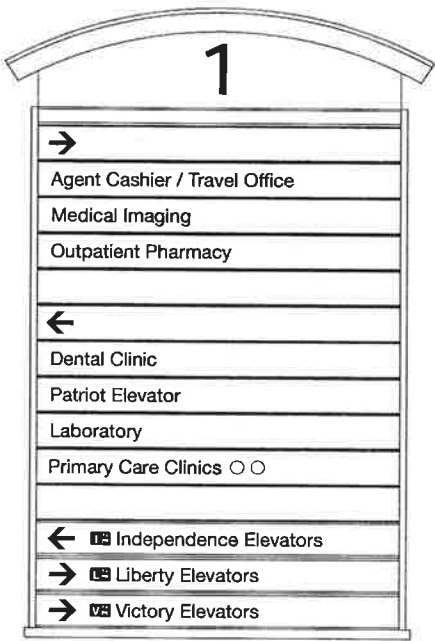
PART J (not shown)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts A, B & standard series sign
Locate two strips vertically in between pre-drilled screw holes

NOTES

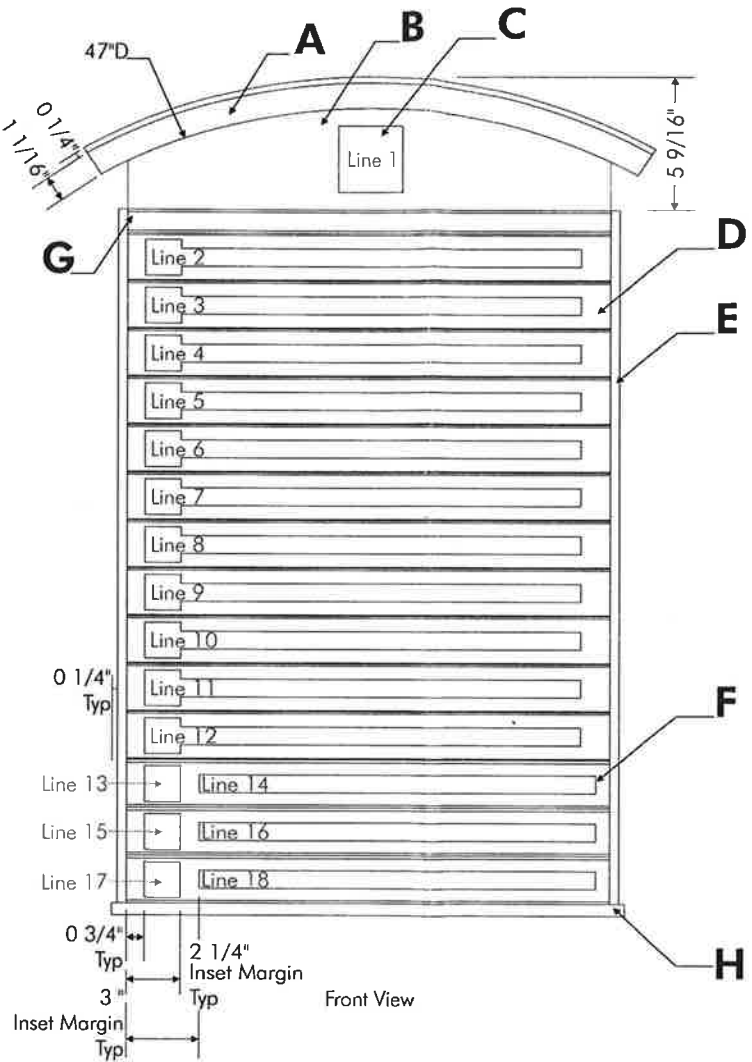
- *For Part D, Facility may request option of window insert w/lens & paper insert
Paper insert file 2x20A to be provided to client by ASA
Will require new lens & Standard White (LP-W) paper w/black laser copy
- See Sign Fabrication Sheet on Section 9 of Manual for assembly details
- See Symbols Page and Message Schedules for Circle Symbols colors

Visual Example for demonstration only
Not To Scale



Fold on this line
For faxing

Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original sign type drawing in manual.
Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities
Write desired part letter & quantity in box(es) below.
A

Mounting
Indicate mounting option in box below, if applicable.

Copy
Print copy in numbered boxes on drawing above, if applicable.
Pay attention to capitalization, spelling and placement.

2/90
Sign Systems
First to lasting impressions®
800.777.4310
290signs.com

Architectural
SIGN
associates
412.563.5657
signplanning.com
All Rights Reserved

Fold on this line
For faxing

For replacement part / additional sign ordering - See Page 1 of this document for order form.

2/90
Sign Systems
First to lasting impressions®
800.777.4310
290signs.com

Architectural
SIGN
associates
412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (39"h x 16"w), with custom elements,
approx 41"h x 18"w

PART A (quantity 2)

Specs: 3/4" thick Oak bar
Size: 1/2"h x 17 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to top or bottom rail of standard series sign
w/concealed screws

PART B (quantity 3)

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART C

Specs: Non-glare window insert w/second surface sprayed
framing and clear display area
Size: 16"h x 16"w (accepting a 15 1/2"h x 15"w printed insert)
Color: White 208 (Border & Backplate)
Note: See Sign Type L1 for printed insert set specifications

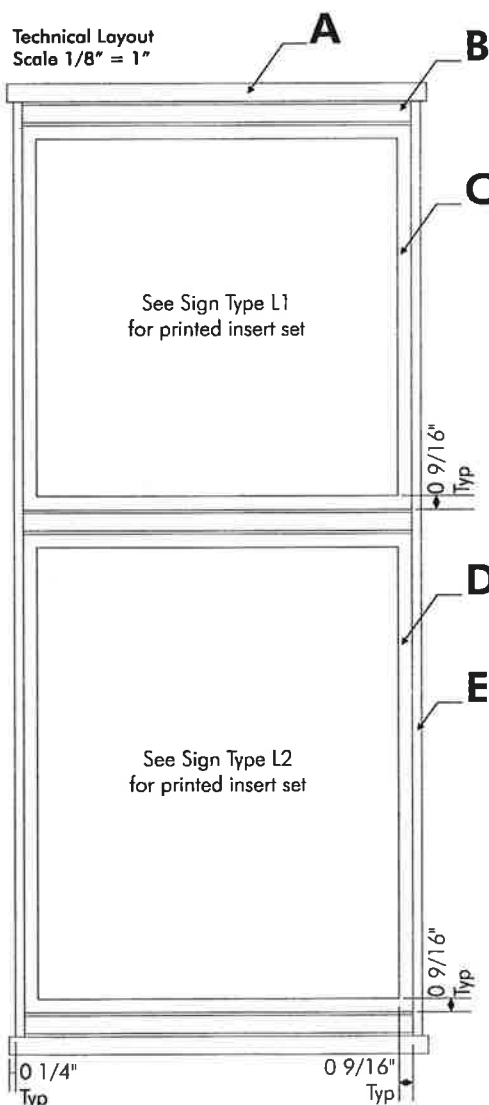
PART D

Specs: Non-glare window insert w/second surface sprayed
framing and clear display area
Size: 20"h x 16"w (accepting a 19 1/2"h x 15"w printed insert)
Color: White 208 (Border & Backplate)
Note: See Sign Type L2 for printed insert set specifications

PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 39"h
Color: White 208

Visual Example
Not To Scale



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Entire Sign

Mounting

Indicate mounting
option in box below,
if applicable.

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Standard Series sign (3@22"h x 16"w),
with custom elements, approx 28"h x 55"w

PART A (quantity 5)

Specs: 3/4" thick Oak bar
Size: 1/2"h x 17 1/4"w
Color: Solid White Stain w/clear coat
Note: Attach to top or bottom rail of standard series sign
w/concealed screws

PART B (quantity 6)

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 16"w (Insert)
1/8"h x 16"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Horizontal grain on insert

PART C (quantity 3)

Specs: Non-glare window insert w/second surface sprayed
framing and clear display area
Size: 20"h x 16"w (accepting a 19 1/2"h x 15"w printed insert)
Color: White 208 (Border & Backplate)
Note: See Sign Type L3 for printed insert set specifications (Side Panels)
See Sign Type L4 for printed insert specifications (Middle Panel)

PART D (quantity 6)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 22"h
Color: White 208

PART E

Specs: 1" thick Oak board w/custom profile
Size: TBD
Color: Solid White Stain w/clear coat
Note: Horizontal grain

PART F

Specs: 3/8" thick acrylic plaque w/D2S logo
Size: TBD
Color: White 208
Copy: "VA MARK1" Logo
Size: 2 1/2" centered
Font: N/A
Color: Match Black 204

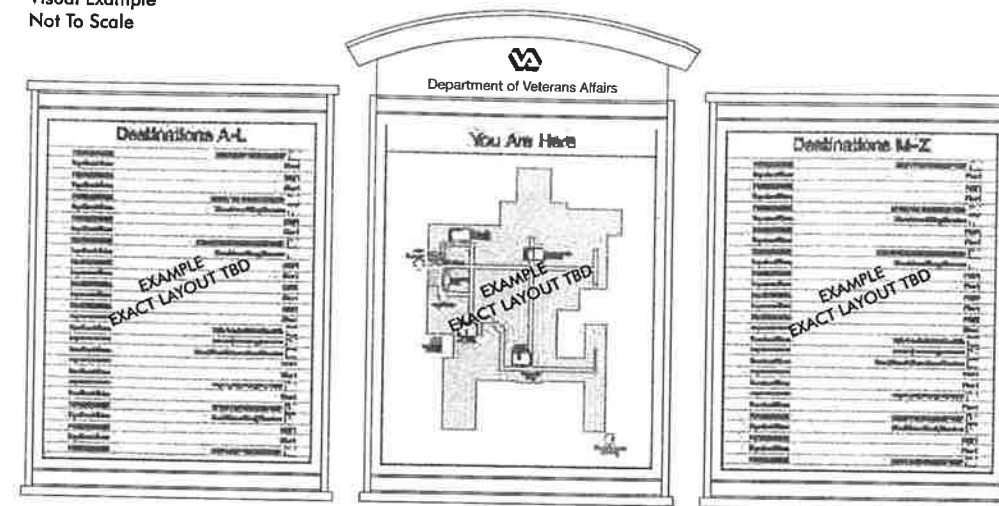
PART G (quantity 2)

Specs: Metal mending strips
Size: TBD
Color: TBD
Note: To attach Parts E & F to standard series sign (Middle Panel)
Locate two strips vertically in between pre-drilled screw holes

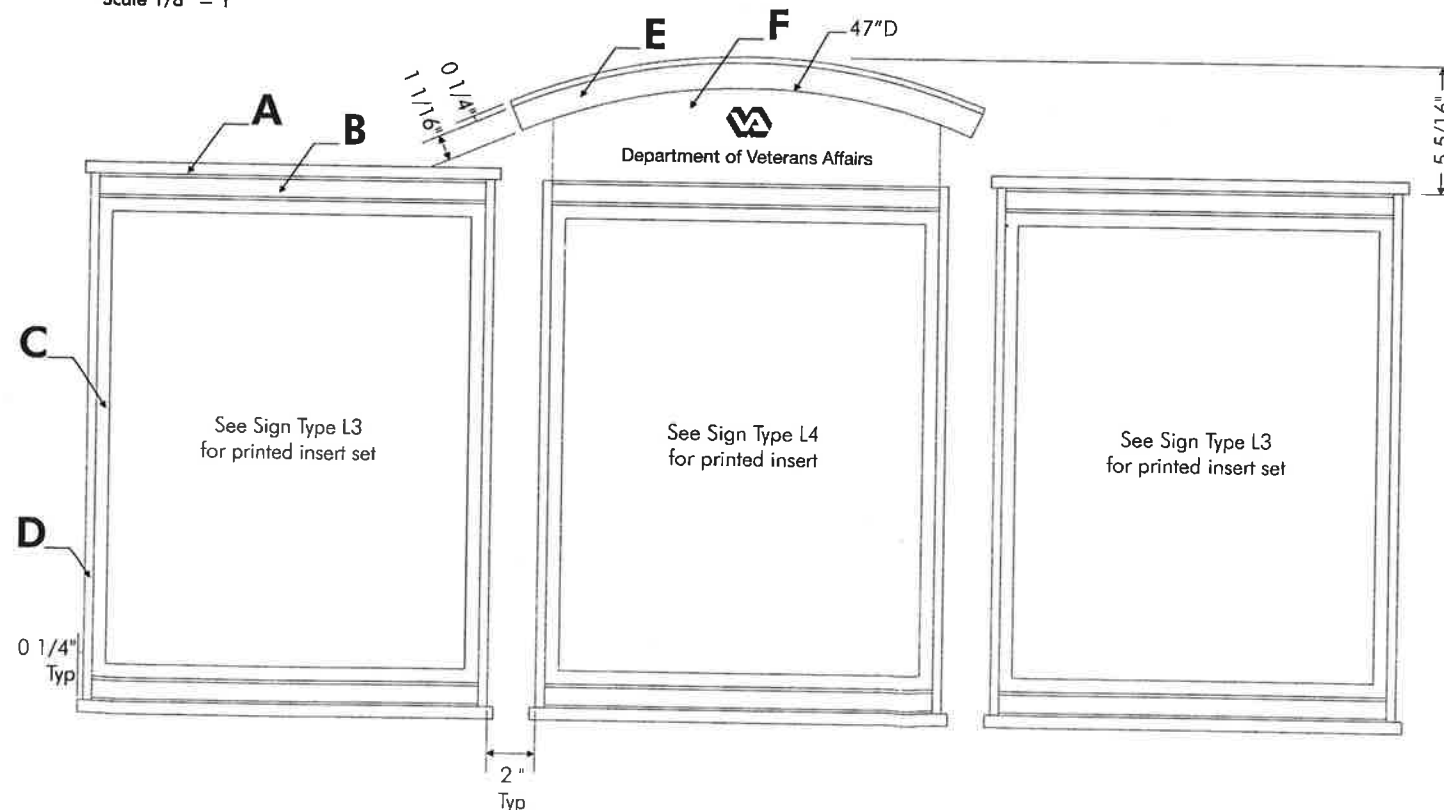
NOTES

- See Sign Fabrication Sheet on Section 9 of Manual for assembly details
for Middle Panel

Visual Example
Not To Scale



Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Entire Sign

A

Mounting

Indicate mounting
option in box below,
if applicable.

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems
first to lasting impressions™

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

Fold on this line
For faxing

For replacement part / additional sign ordering - See Page 1 of this document for order form.

2/90
Sign Systems
first to lasting impressions™

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com

All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 9"h x 38"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top Extruded Aluminum Edge Rail for ceiling mount
Size: NA
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

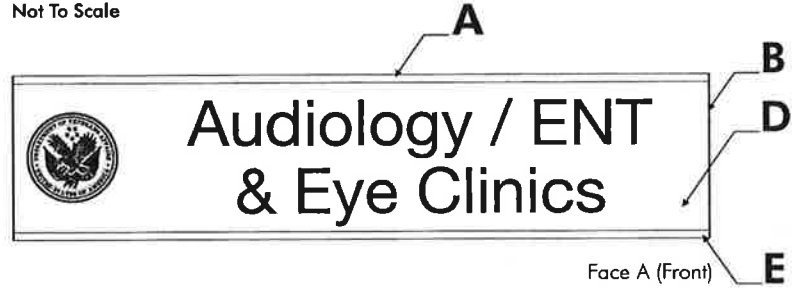
PART D (quantity 2)

Specs: ABS insert w/D2S symbol and
Surface applied vinyl copy
Size: 8 1/2"h x 38"w
Color: White 208
Copy: Lines 1a (D2S)
Size: 5" left justified
Font: NA
Color: Match Multicolor logo artwork
Note: Contact VA Fargo for Multicolor logo artwork
Lines 1b (D2S)
Size: 5" right justified
Font: NA
Color: Match Multicolor logo artwork
Note: Contact VA Fargo for Multicolor logo artwork
Lines 2a/b & 3a/b (Vinyl)
Size: 2 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black Matte 704
Note: Condense Lines 2 & 3 to fit 29 1/2"w max if needed,
hold to baseline
Vinyl copy required on Lines 2 & 3 to allow
for facility updating

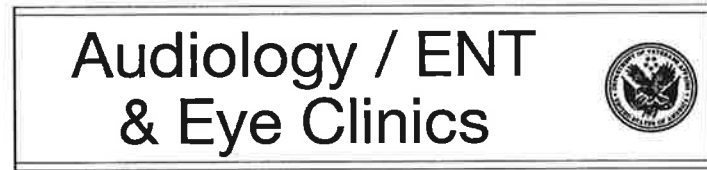
PART E

Specs: Bottom Extruded Aluminum Edge Rail
Size: NA
Color: Gold 160

Visual Example for demonstration only
Not To Scale

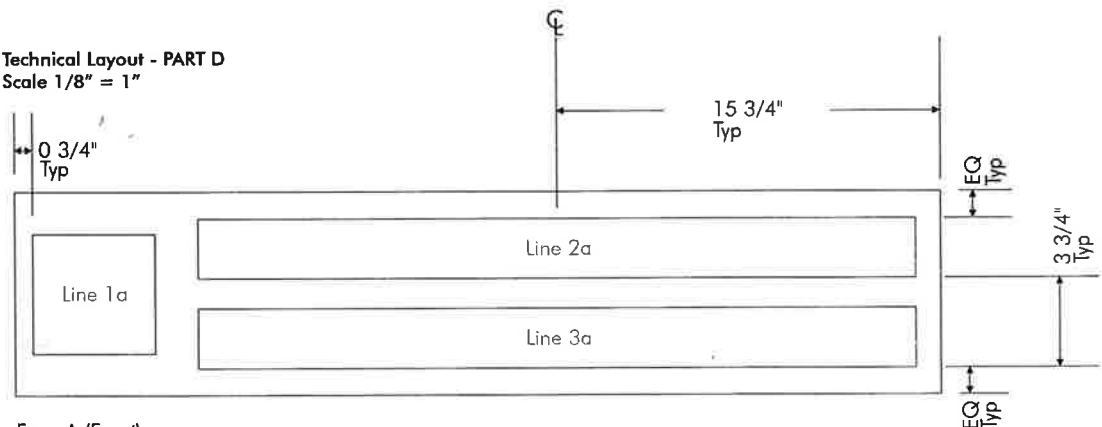


Face A (Front)



Face B (Back)

Technical Layout - PART D
Scale 1/8" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Mounting

Indicate mounting
option in box below,
if applicable.

--

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 9"h x 38"w
One-Sided Overhead Wall Mount

PART A

Specs: Top/Bottom Extruded Aluminum Edge Rail
Size: NA
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

PART D

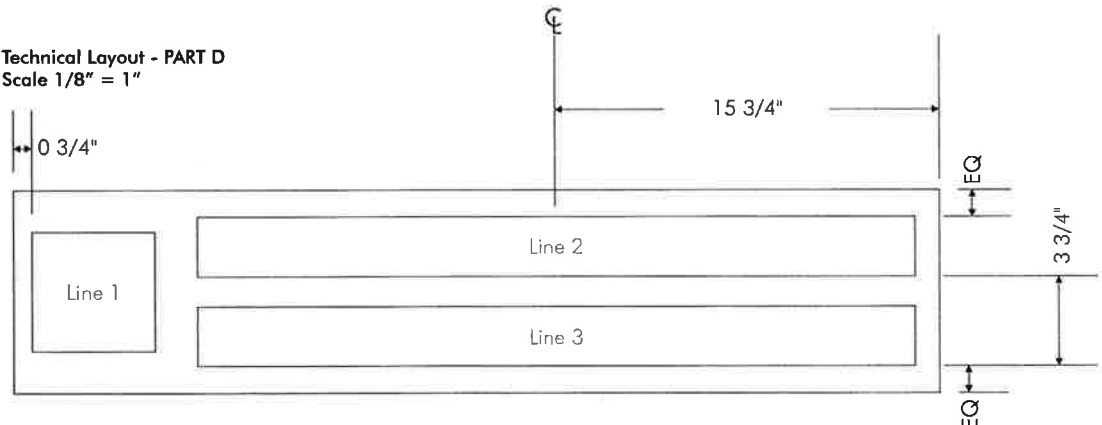
Specs: ABS insert w/D2S symbol and
Surface applied vinyl copy
Size: 8 1/2"h x 38"w
Color: White 208
Copy: Line 1 (D2S)
Size: 5" left justified
Font: NA
Color: Color:Match Multicolor logo artwork
Note: Contact VA Fargo for Multicolor logo artwork
Lines 2 & 3 (Vinyl)
Size: 2 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black Matte 704

Note: Condense Lines 2 & 3 to fit 29 1/2"w max if needed,
hold to baseline
Vinyl copy required on Lines 2 & 3 to allow
for facility updating

Visual Example for demonstration only
Not To Scale



Technical Layout - PART D
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	

Mounting

Indicate mounting
option in box below,
if applicable.

--

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 6"h x 38"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top Extruded Aluminum Edge Rail for Ceiling Mount
Size: NA
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

PART D (quantity 2)

Specs: ABS insert w/D2S symbol and surface applied vinyl copy
Size: 6"h x 38"w
Color: White 208
Copy: Lines 1a (D2S)
Size: 4 1/2" left justified
Font: N/A
Color: Color:Color:Match Multicolor logo artwork
Note: Contact VA Fargo for Multicolor logo artwork
Lines 1b (D2S)
Size: 4 1/2" right justified
Font: N/A
Color: Color:Color:Match Multicolor logo artwork
Note: Contact VA Fargo for Multicolor logo artwork
Lines 2a/b (Vinyl)
Size: 2 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black Matte 704
Note: Condense Line 2 to fit 29 1/2"w max if needed, hold to baseline
Vinyl copy required on Line 2 to allow for facility updating

PART E

Specs: Bottom Extruded Aluminum Edge Rail
Size: NA
Color: Gold 160

Visual Example for demonstration only
Not To Scale

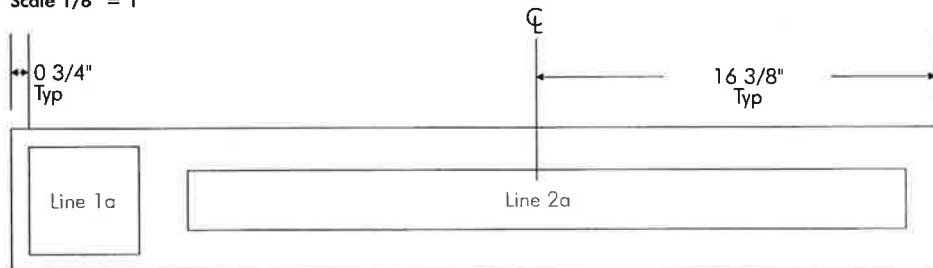


Face A (Front)



Face B (Back)

Technical Layout - PART D
Scale 1/8" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Face A (Front)

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Mounting

Indicate mounting option in box below, if applicable.

--

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 9"h x 38"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top/Bottom Extruded Aluminum Edge Rail for ceiling mount
Size: NA
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

PART D (quantity 2)

Specs: ABS insert w/D2S print
Size: 8 1/2"h x 38"w
Color: White 208
Copy: Line 1a

Size: 5" left justified
Font: N/A
Color: Match Black Matte 704

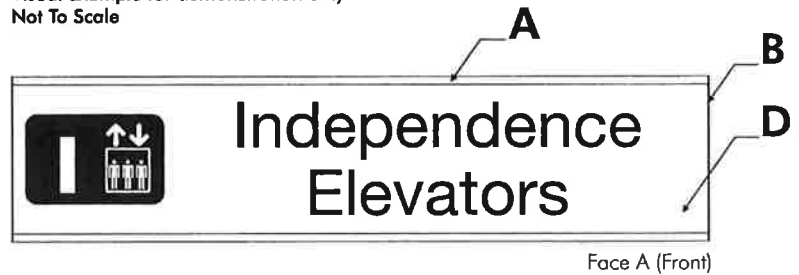
Line 1b

Size: 5" right justified
Font: N/A
Color: Match Black Matte 704

Lines 2a/b & 3a/b

Size: 2 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704

Visual Example for demonstration only
Not To Scale

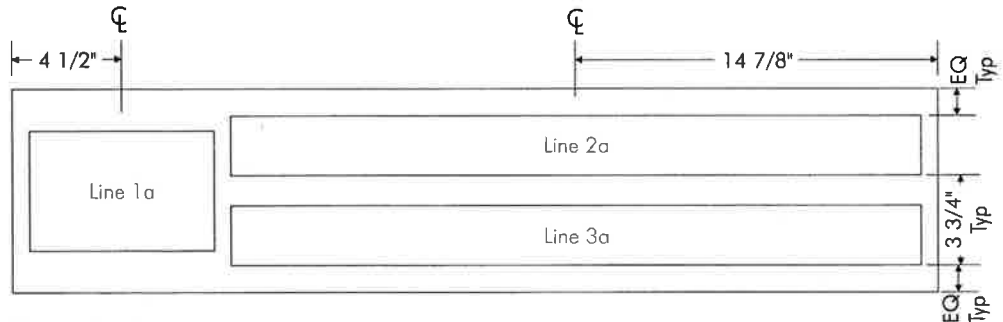


Face A (Front)



Face B (Back)

Technical Layout - PART D Scale 1/8" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities
Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 6"h x 24"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top/Bottom Extruded Aluminum Edge Rail for ceiling mount
Size: N/A
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: N/A
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: N/A
Color: Standard Black

PART D (quantity 2)

Specs: ABS insert w/D25 symbol and surface applied vinyl copy
Size: 6"h x 24"w
Color: White 208
Copy: Line 1a (D2S)

Size: 4" left justified

Font: N/A

Color: Color:Match Multicolor logo artwork

Note: Contact VA Fargo for Multicolor logo artwork

Line 1b (D2S)

Size: 4" right justified

Font: N/A

Color: Color:Match Multicolor logo artwork

Note: Contact VA Fargo for Multicolor logo artwork

Lines 2a/b (Vinyl)

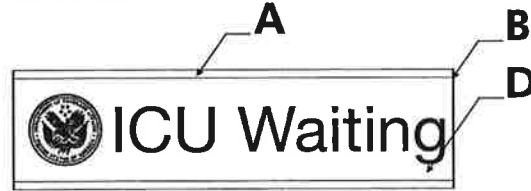
Size: 2 1/2" centered as shown

Font: Helvetica Regular (HRC)

Color: Black Matte 704

Note: Vinyl copy required on Lines 2a/b to allow for facility updating

Visual Example for demonstration only
Not To Scale

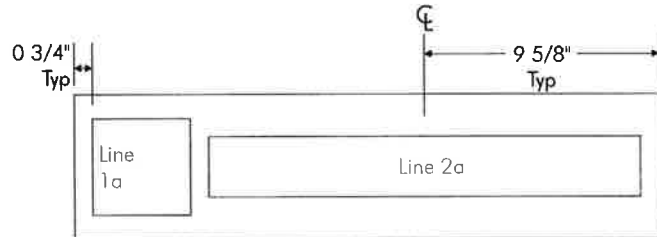


Face A (Front)



Face B (Back)

Technical Layout - PART D
Scale 1/8" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 6"h x 24"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top/Bottom Extruded Aluminum Edge Rail for ceiling mount
Size: N/A
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: N/A
Color: Black 204

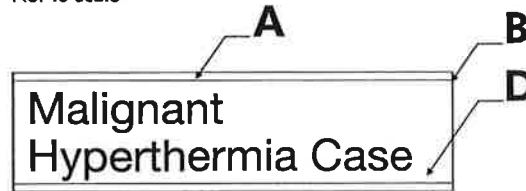
PART C (not shown)

Specs: Internal Support Insert
Size: N/A
Color: Standard Black

PART D (quantity 2)

Specs: ABS insert w/surface applied vinyl copy
Size: 6"h x 24"w
Color: White 208
Copy: Lines 1a & 2a
Size: 1 3/4" left justified
Font: N/A
Color: Black Matte 704
Lines 1b & 2b
Size: 1 3/4" right justified
Font: N/A
Color: Black Matte 704

Visual Example for demonstration only
Not To Scale

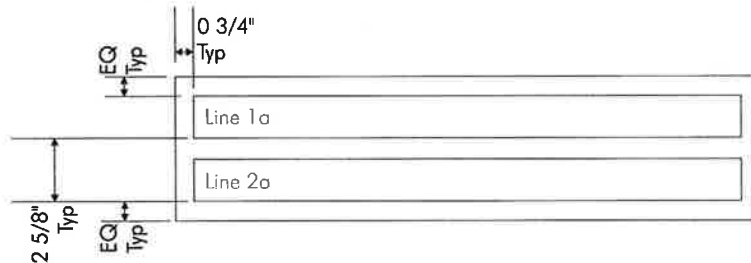


Face A (Front)



Face B (Back)

Technical Layout - PART D
Scale 1/8" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities
Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Mounting
Indicate mounting option in box below, if applicable.

Copy
Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 6"h x 13"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top/Bottom Extruded Aluminum Edge Rail for ceiling mount
Size: NA
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

PART D (quantity 2)

Specs: ABS insert w/D2S copy
Size: 6"h x 13"w
Color: White 208
Copy: Line 1a
Size: 3" right justified
Font: N/A
Color: Match Black Matte 704
Line 1b
Size: 3" left justified
Font: N/A
Color: Match Black Matte 704
Line 2a
Size: 1 1/4" right justified
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704
Line 2b
Size: 1 1/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704

Note: Condense line 2a/b to fit 11 3/4"w max if needed
hold to baseline

Visual Example for demonstration only
Not To Scale

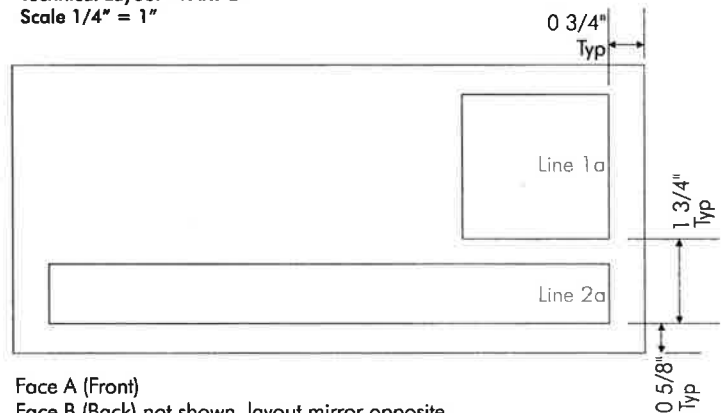


Face A (Front)



Face B (Back)

Technical Layout - PART D
Scale 1/4" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	

Mounting

Indicate mounting
option in box below,
if applicable.

--

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 6"h x 13"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top Extruded Aluminum Edge Rail for ceiling mount
Size: NA
Color: White 208

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

PART D (quantity 2)

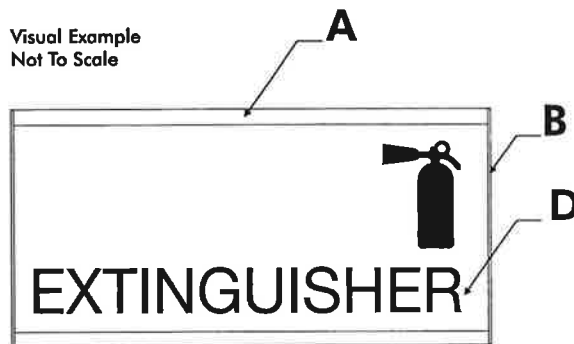
Specs: ABS insert w/D2S copy
Size: 6"h x 13"w
Color: Cardinal Red 236
Copy: Line 1a
Size: 3" right justified
Font: NA
Color: Match White Matte 708
Line 1b
Size: 3" left justified
Font: NA
Color: Match White Matte 708
Line 2a
Size: 1 1/4" right justified
Font: Helvetica Regular (HRC)
Color: Match White Matte 708
Line 2b
Size: 1 1/4" left justified
Font: Helvetica Regular (HRC)
Color: Match White Matte 708

Note: Condense line 2a/b to fit 11 3/4"w max if needed
hold to baseline
When symbol on Lines 1a/b is a Fire Extinguisher
Match Visual Example

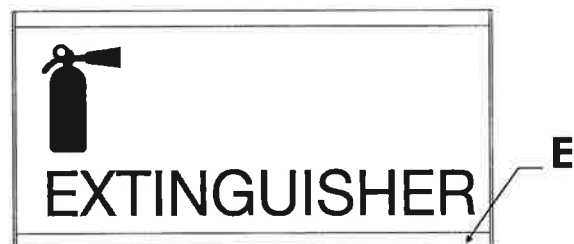
PART E

Specs: Bottom Extruded Aluminum Edge Rail
Size: NA
Color: Cardinal Red 236

Visual Example
Not To Scale

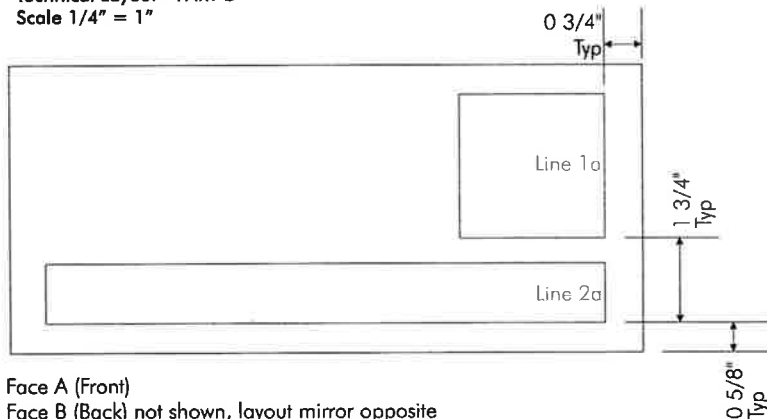


Face A (Front)



Face B (Back)

Technical Layout - PART D
Scale 1/4" = 1"



Face A (Front)

Face B (Back) not shown, layout mirror opposite

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity	Entire Sign
A		
B		
C		
D		
E		

Mounting

Indicate mounting option in box below, if applicable.

--

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 17"h x 54"w
One-Sided Overhead Wall Mount

PART A

Specs: Top/Bottom Extruded Aluminum Edge Rail
Size: N/A
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: N/A
Color: Black 204

PART C (not shown)

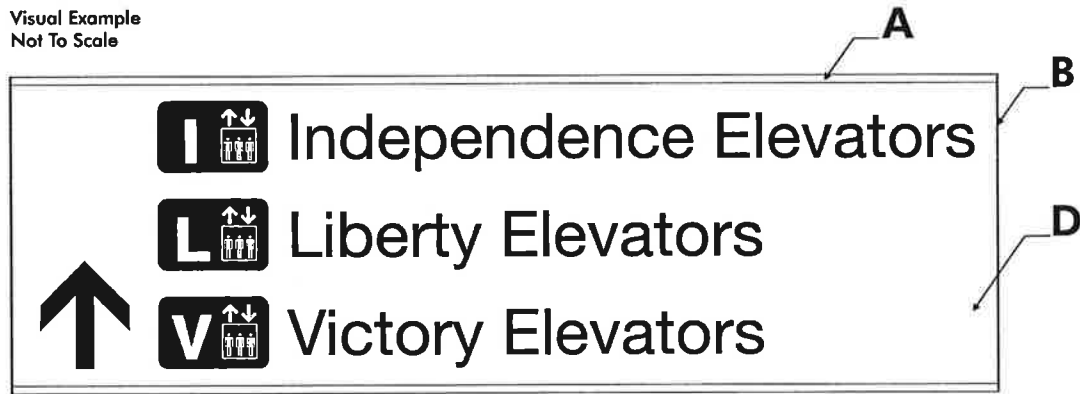
Specs: Internal Support Insert
Size: N/A
Color: Standard Black

PART D

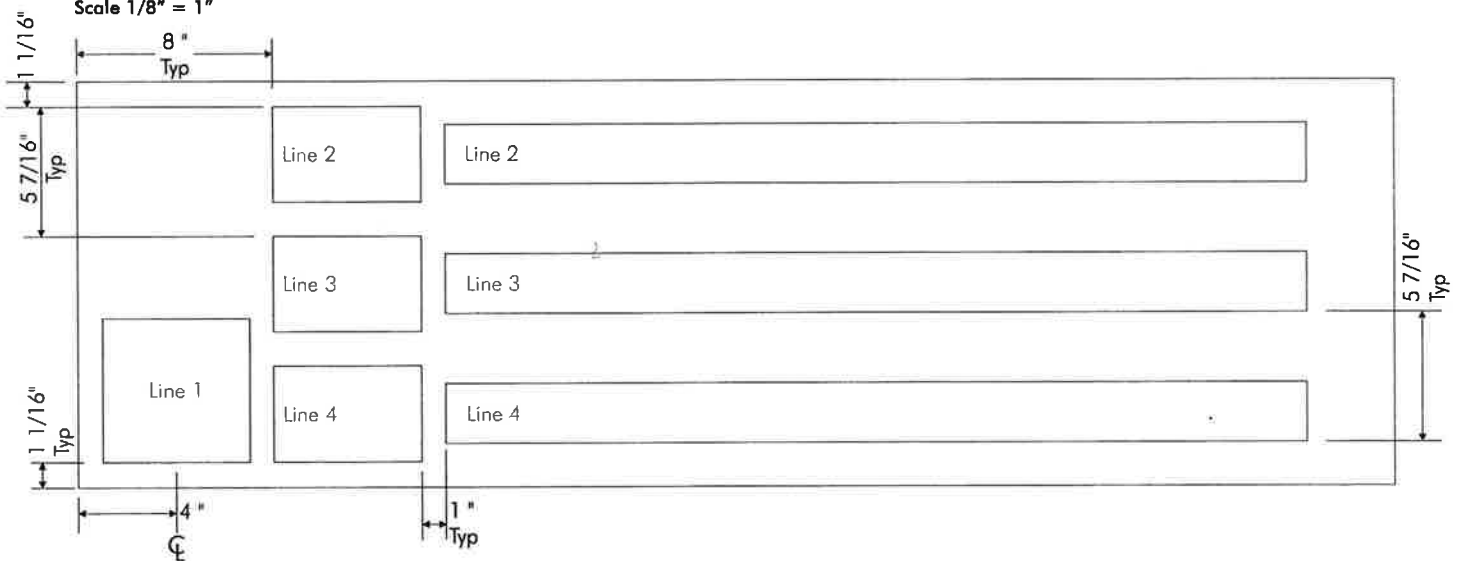
Specs: ABS insert w/D2S print
Size: 17"h x 54"w
Color: White 208
Copy: Line 1(Arrows)
Size: 6" centered as shown
Font: N/A
Color: Match Black Matte 704
Lines 2-4 (Symbols)
Size: 4" left justified
Font: N/A
Color: Match Black Matte 704
Lines 2-4 (Text)
Size: 2 1/2" left justified
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704

Note: Arrows are measured tip to tail

Visual Example
Not To Scale



Technical Layout - PART D
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities
Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	
F	
G	
H	
I	
J	
K	
L	
M	
N	
O	
P	
Q	
R	
S	
T	
U	
V	
W	
X	
Y	
Z	

Mounting
Indicate mounting option in box below, if applicable.

Copy
Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vertical Arc Series sign, approx 9"h x 38"w
Two-Sided Overhead Ceiling Mount

PART A

Specs: Top Extruded Aluminum Edge Rail for ceiling mount
Size: NA
Color: Gold 160

PART B

Specs: Side Steel Holder
Size: NA
Color: Black 204

PART C (not shown)

Specs: Internal Support Insert
Size: NA
Color: Standard Black

PART D

Specs: ABS insert w/surface applied vinyl copy
Size: 8 1/2"h x 38"w
Color: White 208
Copy: Line 1

Size: 1 3/4" centered
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704

Lines 2-4

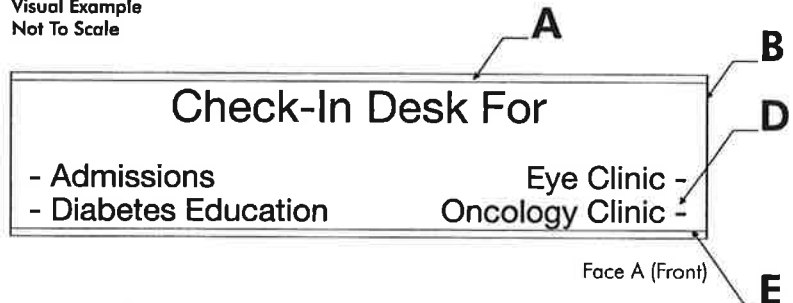
Size: 1 1/4" left justified
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704

Lines 5-7

Size: 1 1/4" right justified
Font: Helvetica Regular (HRC)
Color: Match Black Matte 704

Note: Vinyl copy required to allow for facility updating

Visual Example
Not To Scale

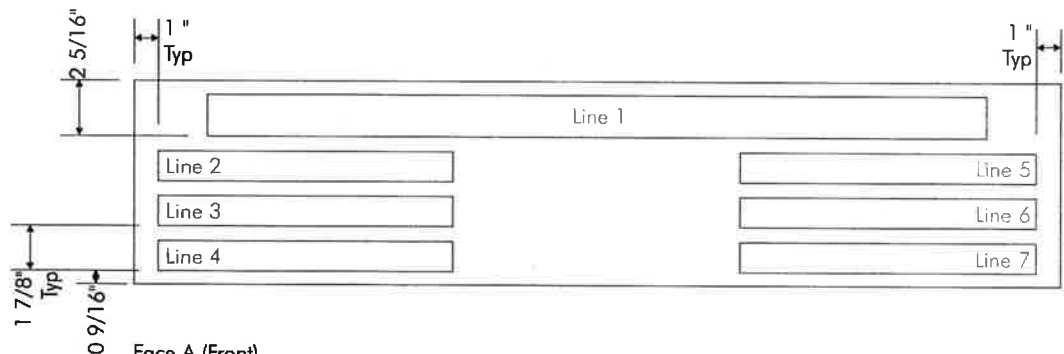


Face B (Back)

Technical Layout - PART D
Scale 1/8" = 1"

PART E

Specs: Bottom Extruded Aluminum Edge Rail
Size: NA
Color: Gold 160



Face A (Front)

Face B (Back) not shown, layout blank

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

A									
---	--	--	--	--	--	--	--	--	--

Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

--

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Plaque, 7"h x 7"w

ART A

Specs: ABS plaque w/D2S copy

Size: 7"h x 7"w

Color: Cardinal Red 236

Copy: Lines 1, 3 & 4

Size: 1/2" centered

Font: Helvetica Regular (HRC)

Color: Match White 208

Line 2

Size: 3 1/2" centered

Font: NA

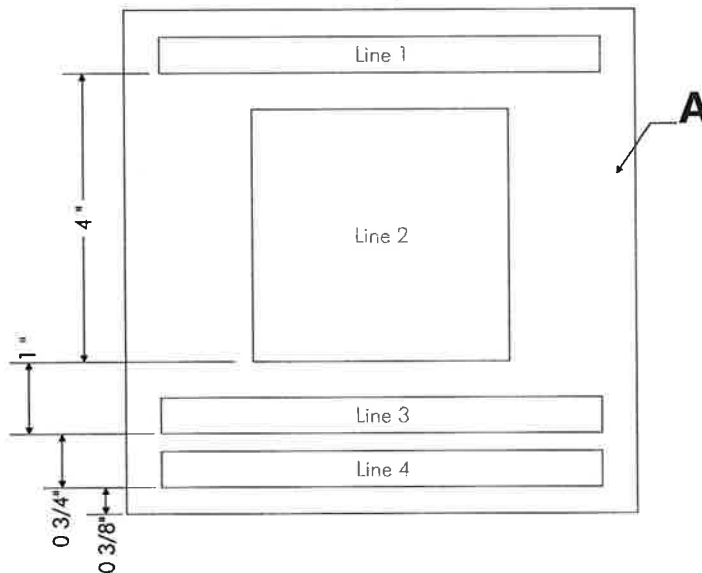
Color: Match White 208

Note: Blunt corners of plaque with 1/32" radius corners,
no sharp edges

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	

Entire Sign

Mounting

Indicate mounting
option in box below,
if applicable.

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Plaque, 2"h x 7"w

ART A

Specs: ABS plaque w/D2S copy

Size: 2"h x 7"w

Color: Cardinal Red 236

Copy: Lines 1 & 2

Size: 1/2" centered

Font: Helvetica Regular (HRC)

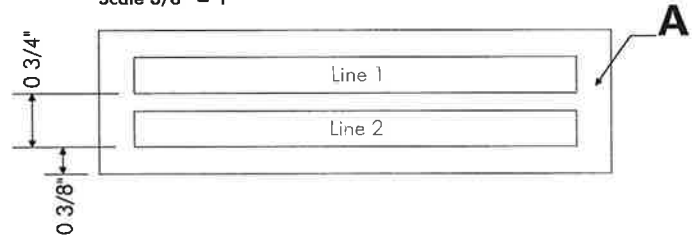
Color: Match White 208

Note: Blunt corners of plaque with 1/32" radius corners,
no sharp edges

Visual Example for demonstration only
Not To Scale

Oxygen Storage
No Open Flames

Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

A									
---	--	--	--	--	--	--	--	--	--

Entire Sign

Mounting

Indicate mounting
option in box below,
if applicable.

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 13"h x 9"w

PART A

- Specs:** Non-glare hinge window insert w/second surface sprayed framing, D2S print on backplate, clear display area and slimline pull bar
- Size:** 12"h x 9"w (accepting an 11"h x 8 1/2"w insert) (Insert Overall) 7 7/8"w (Pull Bar)
- Color:** White 208 (Border & Backplate)
Bronze 156 (Pull Bar)
- Copy:** VAMC MARK Logo
Size: 4" centered as shown
Font: N/A
Color: Match Light Neutral 202
- Note:** User generated paper insert

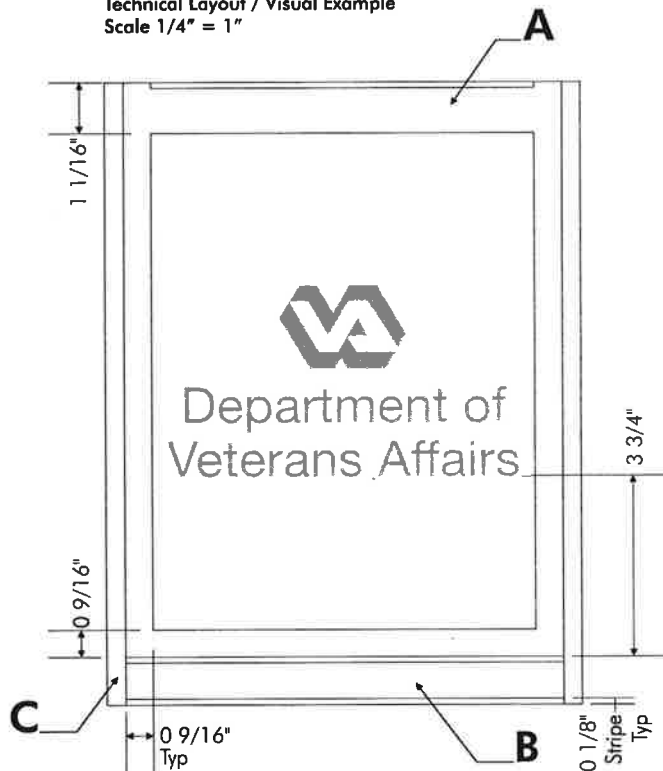
PART B

- Specs:** Aluminum insert w/painted top/bottom stripe
- Size:** 1"h x 9"w (Insert)
1/8"h x 9"w (Stripes)
- Color:** Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
- Note:** Grain of insert to face horizontal

PART C (quantity 2)

- Specs:** Square corner tamper resistant end cap (SC-TREC)
- Size:** 13"h
- Color:** White 208

Technical Layout / Visual Example
Scale 1/4" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
Entire Sign	

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 21"h x 13"w

ART A

Specs: Top accent trim
Size: 13"w
Color: Bronze 156

PART B

Specs: ABS insert w/D2S copy
Size: 2"h x 13"w
Color: White 208
Copy: Line 1
Size: 1" centered
Font: Helvetica Regular (HRC)
Color: Match Black 204

PART C

Specs: Non-glare hinge window insert w/second surface sprayed framing, clear display area, and slimline pull bar
Size: 18"h x 13"w (accepting a 17"h x 11"w insert)(Insert Overall)
10 7/8"w (Pull Bar)
Color: White 208 (Border & Backplate)
Bronze 156 (Pull Bar)
Note: See Sign Types L5, L7 or L8 for printed insert specifications

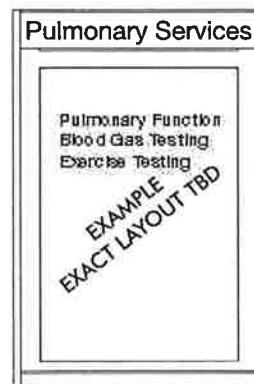
PART D

Specs: Aluminum insert w/painted top/bottom stripe
Size: 1"h x 13"w (Insert)
1/8"h x 13"w (Stripes)
Color: Anodized Gold 102 (Insert)
Bronze 156 (Stripes)
Note: Grain of insert to face horizontal

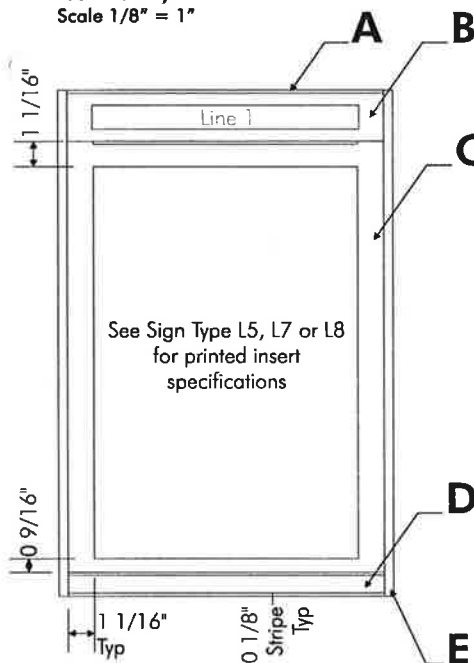
PART E (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 21"+h
Color: White 208

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	
E	

Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

--

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

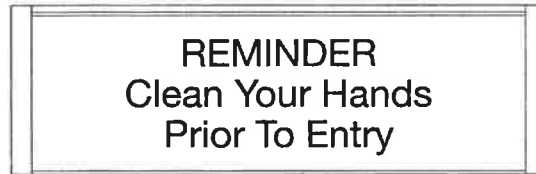
PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 3"h x 9"w

PART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

Visual Example for demonstration only
Not To Scale

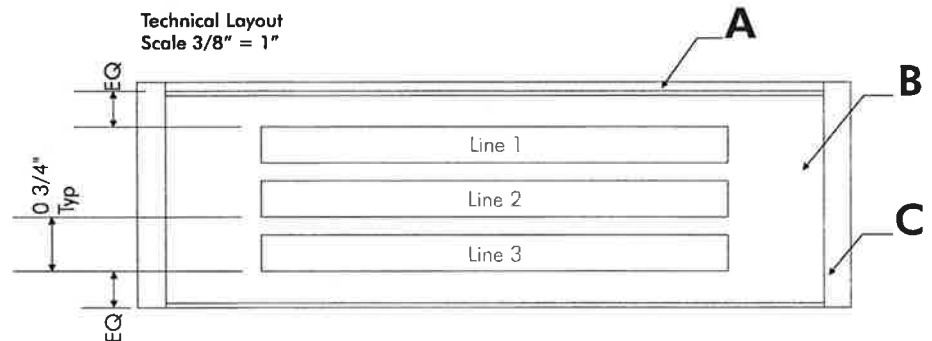


PART B

Specs: Window insert carrier w/lens & paper insert installed
Size: 3"h x 9"w
Color: Gold 160 (Carrier)
Paper: Standard White (LP-W)
Copy: Lines 1-3
Size: 1/2" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Note: Paper insert file 3x9B to be provided to client by ASA

PART C (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 3"+h
Color: White 208



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

A										Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 6"h x 9"w

ART A

Specs: ABS insert w/D2S copy
Size: 1"h x 9"w
Color: Yellow 215
Copy: Line 1
Size: 3/4" centered
Font: Helvetica Regular (HRC)
Color: Match Black 204

PART B

Specs: Window insert carrier w/lens & paper insert installed
Size: 5"h x 9"w
Color: White 208 (Carrier)
Paper: Standard White (LP-W)
Copy: Lines 2-5
Size: 5/8" centered as shown
Font: Helvetica Regular (HRC)
Color: Black laser copy
Note: Paper insert file 5x9A to be provided to client by ASA

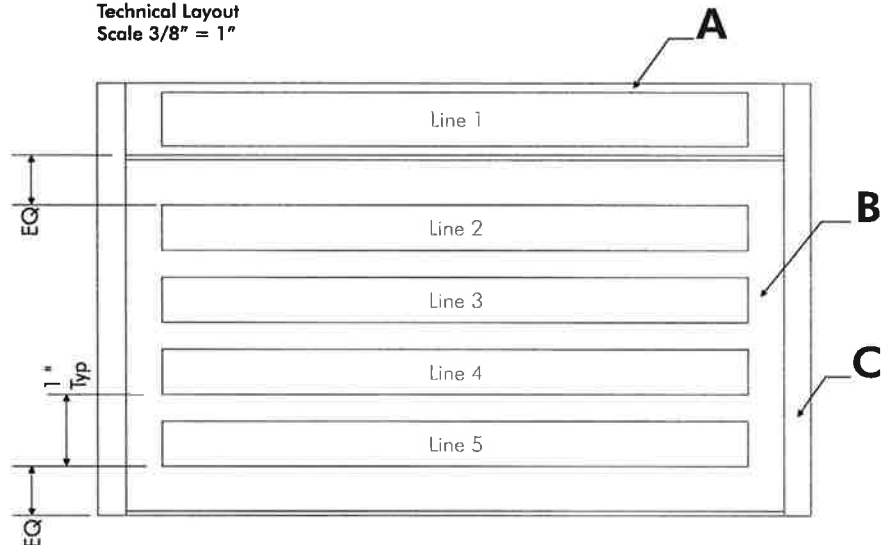
PART C (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 6"h
Color: White 208

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	

Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

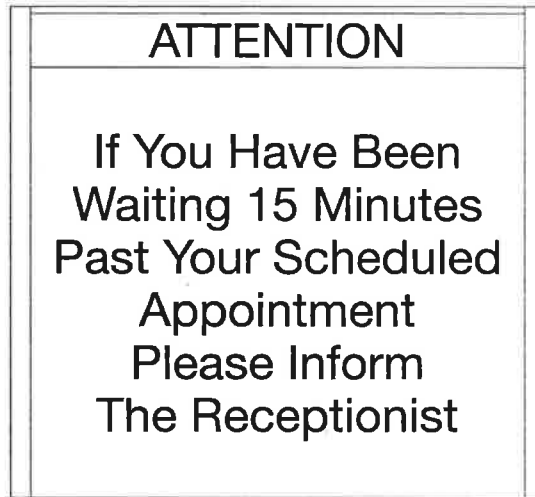
PRODUCT DESCRIPTION

2/90 Sign Systems Thin Series sign, approx 9"h x 9"w

ART A

Specs: Top accent trim
Size: 9"w
Color: Bronze 156

Visual Example for demonstration only
Not To Scale



PART B

Specs: ABS insert w/D2S copy
Size: 1"h x 9"w
Color: Gold 160
Copy: Line 1
Size: 5/8" centered
Font: Helvetica Regular (HRC)
Color: Match Black 204
Note: Horizontal grain on insert

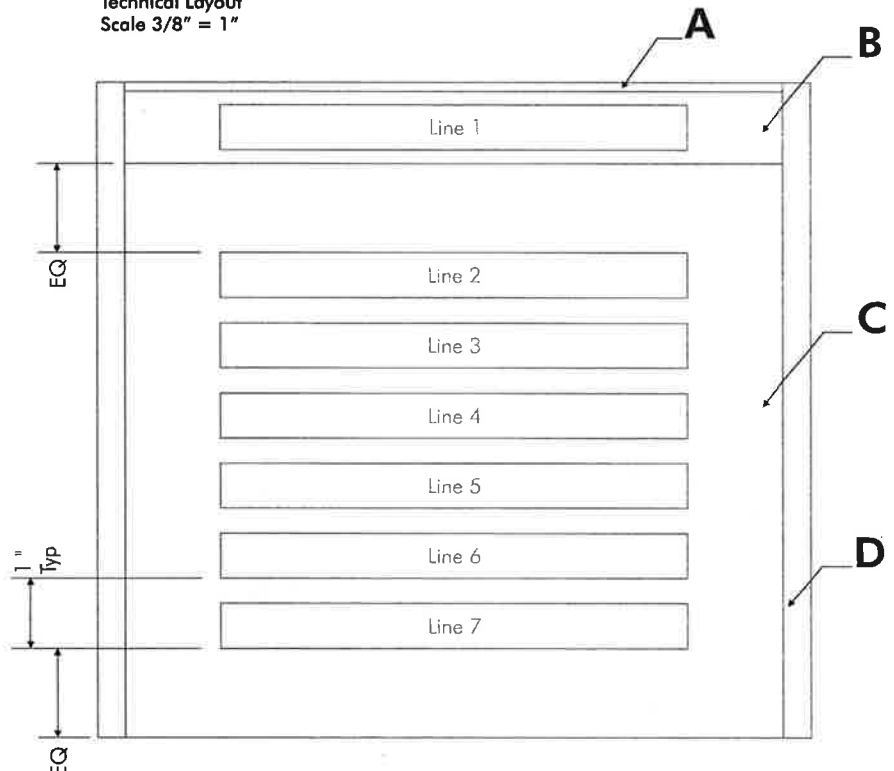
PART C

Specs: ABS insert w/D2S copy
Size: 8"h x 9"w
Color: White 208
Copy: Lines 2-7
Size: 5/8" centered as shown
Font: Helvetica Regular (HRC)
Color: Match Black 204

PART D (quantity 2)

Specs: Square corner tamper resistant end cap (SC-TREC)
Size: 9"+h
Color: White 208

Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	
C	
D	

Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

--

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Plaque, 7"h x 7"w

ART A

Specs: ABS plaque w/D25 copy

Size: 7"h x 7"w

Color: White 208

Copy: Line 1

Size: 3 1/2" centered

Font: N/A

Color: Match Black 204

Lines 2-4

Size: 1/2" centered

Font: Helvetica Regular (HRC)

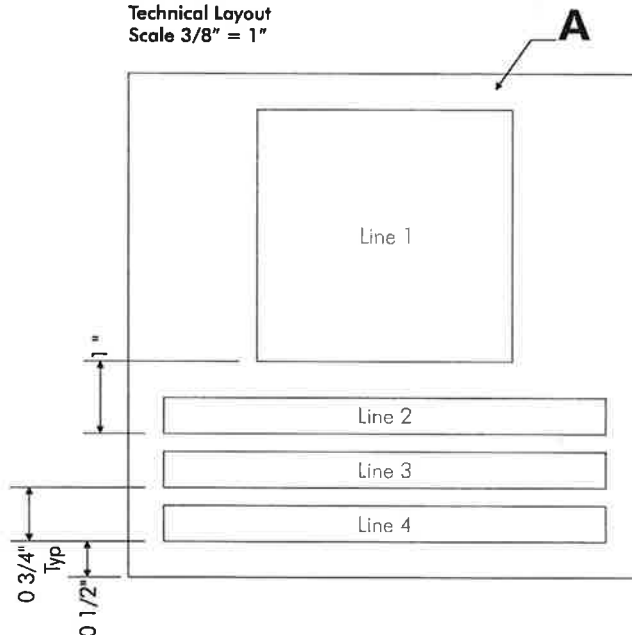
Color: Match Black 204

Note: Blunt corners of plaque with 1/32" radius corners,
no sharp edges

Visual Example for demonstration only
Not To Scale



Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities

Write desired part letter &
quantity in box(es) below.

Part	Quantity
A	

Entire Sign

Mounting

Indicate mounting
option in box below,
if applicable.

--

Copy

Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

PRODUCT DESCRIPTION

2/90 Sign Systems Vinyl Applique

PART A

Specs: Vinyl applique w/D2S copy

Color: Black Matte 704

Copy: Line 1

Size: 10" left justified

Font: N/A

Color: Match White Matte 708

Note: See Symbols Page for symbols

PART B

Specs: Vinyl applique w/D2S copy

Size: 4"h x 20"w

Color: Match Gold 160

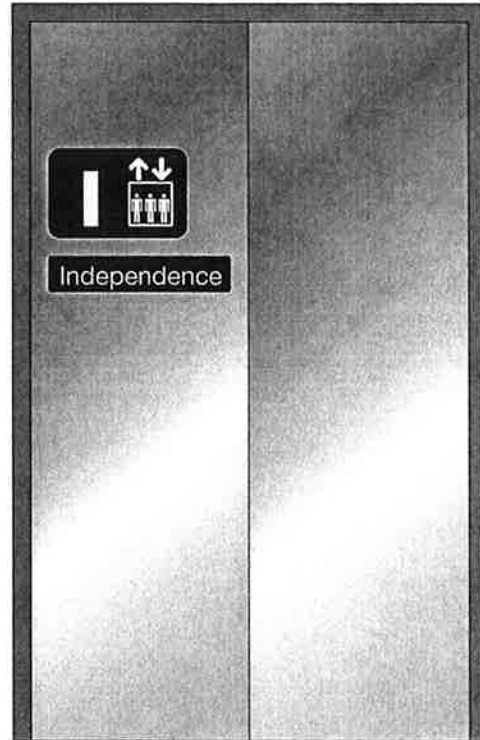
Copy: Line 2

Size: 2" centered

Font: Helvetica Regular (HRC)

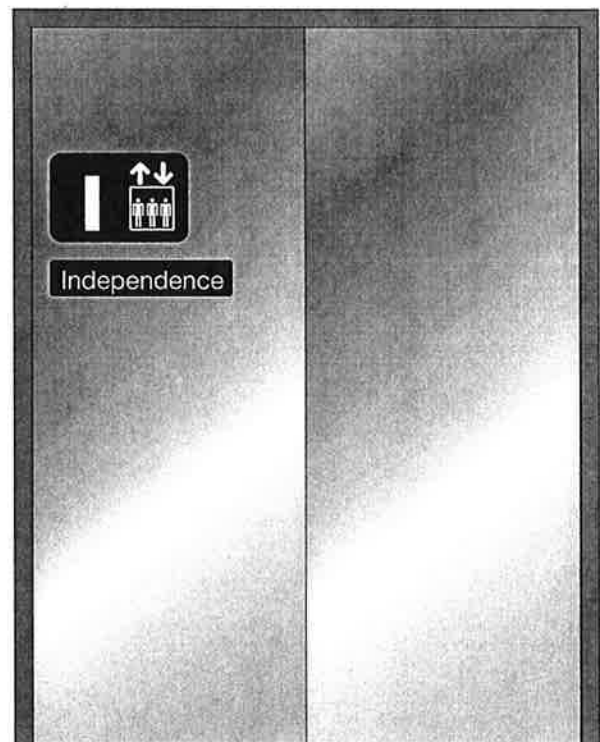
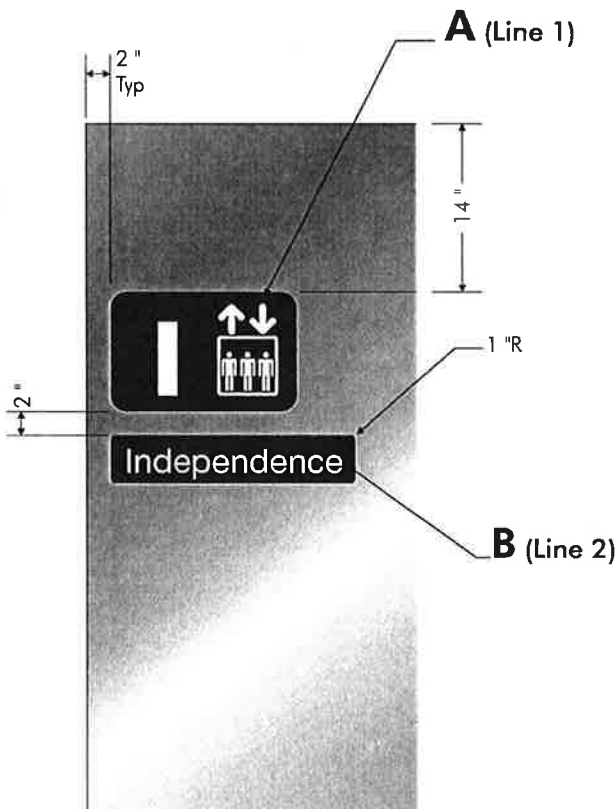
Color: Match Black Matte 704

Visual Example for demonstration only
Not To Scale



24" Door Example

Technical Layout
Scale 1/16" = 1



30" Door Example

Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out

Make a copy & replace original sign type drawing in manual.

Refer to "How to Order New Signs" in Section 1 of manual.

Parts & Quantities

Write desired part letter & quantity in box(es) below.

Part	Quantity
A	
B	

Entire Sign

Mounting

Indicate mounting option in box below, if applicable.

Copy

Print copy in numbered boxes on drawing above, if applicable.

Pay attention to capitalization, spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

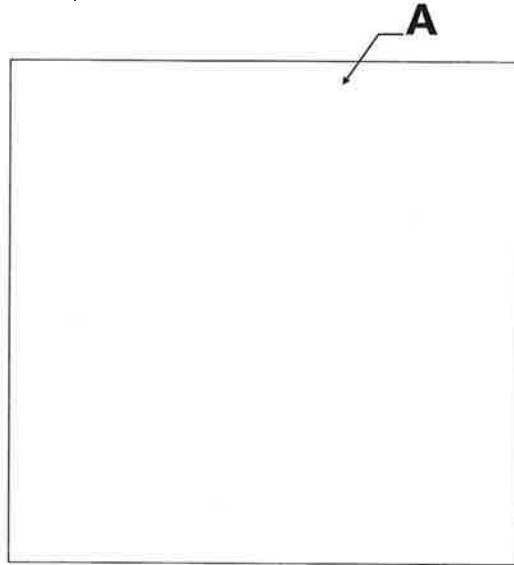
PRODUCT DESCRIPTION

2/90 Sign Systems Vinyl Applique

ART A

Specs: Vinyl Applique
Size: 7"h x 7"w
Color: White 208

Technical Layout
Scale 3/8" = 1"



Replacement part / additional sign order form - See front of manual for manufacturer contact information.

Starting Out
Make a copy & replace original
sign type drawing in manual.

Refer to "How to Order New Signs"
in Section 1 of manual.

Parts & Quantities
Write desired part letter &
quantity in box(es) below.

A									
---	--	--	--	--	--	--	--	--	--

Entire Sign

Mounting
Indicate mounting
option in box below,
if applicable.

Copy
Print copy in numbered boxes
on drawing above, if applicable.

Pay attention to capitalization,
spelling and placement.

2/90
Sign Systems

800.777.4310
290signs.com

Architectural
SIGN
associates

412.563.5657
signplanning.com
All Rights Reserved

TECHNICAL SPECIFICATIONS / ORDER FORM

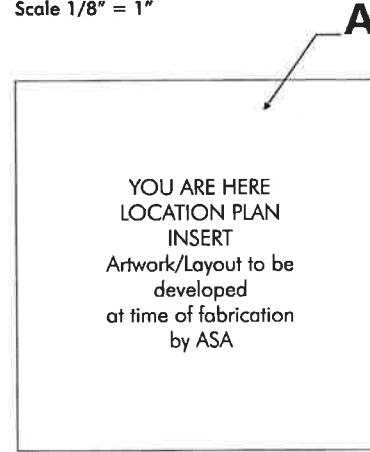
PRODUCT DESCRIPTION

Printed Insert

PART A

Specs: Printed paper insert
Size: 15 1/2" h x 15" w
Paper: Standard White (LP-W)
Note: Used in Sign Type D1

Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - Fax to 2/90 Signs Systems 616.656.4300										Architectural SIGN associates 412.563.5657 signplanning.com All Rights Reserved	
Step 1 Copy & replace original sign type drawing. Use copy as order form.	Step 2 Entire Sign(s) Indicate quantity of signs or part(s) Write desired part letter and quantity in box(es) below A	Step 3 Mount Option Select mount type from Mounting Methods page if applicable Indicate letter	Step 4 Indicate Text Print desired text in white rectangle(s) representing lines of text on sign above. Use proper capitalization.	Step 5 Order Submitted By:	Phone	Fax	Date				

TECHNICAL SPECIFICATIONS / ORDER FORM

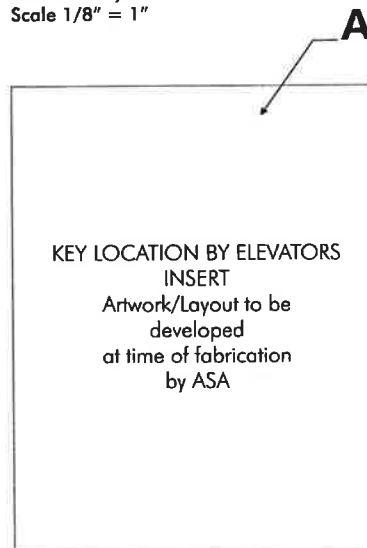
PRODUCT DESCRIPTION

Printed Insert

PART A

Specs: Printed paper insert
Size: 19 1/2"h x 15"w
Paper: Standard White (LP-W)
Note: Used in Sign Type D1

Technical Layout
Scale 1/8" = 1"



Replacement part / additional sign order form - Fax to 2/90 Signs Systems 616.656.4300										Architectural SIGN <small>associates</small> 412.563.5657 signplanning.com All Rights Reserved		
Step 1 ▶	Step 2 ▶	Step 3 ▶	Step 4 ▶	Step 5 ▶	Order Submitted By:							Date
					Phone							
					Fax							
Copy & replace original sign type drawing. Use copy as order form.	Entire Sign(s)	Indicate quantity of signs or part(s) Write desired part letter and quantity in box(es) below	Mount Option Select mount type from Mounting Methods page if applicable. Indicate letter	Indicate Text Print desired text in white rectangle(s) representing lines of text on sign above. Use proper capitalization.								
	A											

SECTION 10 14 15
FABRICATED STAINLESS STEEL LETTERS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies Fabricated Stainless Steel Letter Identification Signage located at exterior drive through canopy as drawn and specified.

1.2 RELATED WORK

- A. Backlighting is specified under Division 26, ELECTRICAL.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Furnish shop drawings showing layout and mounting details.
- C. Furnish sample indicating construction, material, finish and mounting detail.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Material: Face 18 gauge Type 304 stainless steel, side returns 22 gauge Type 304 stainless steel.
- B. Finish: Glass media blast finish.
- C. Font: Franklin Gothic Medium.
- D. Copy: VA Health Care System
- E. Letter Height: 21 inches.
- F. Letter Depth: 1 inch.
- G. Mounting: Strap and stud mount, standoff distance 8 inches from web of beam.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install per manufacturers full size template, shop drawings and installation recommendations and instructions.
- B. Install plumb and true to web of canopy wide flange beam as detailed on manufacturer's shop drawings and with manufacturers recommended hardware.
- C. Coordinate with lighting installation as drawn and specified by Division 26 ELECTRICAL.
- D. Clean letters per manufacturer's recommendations.

- - - END - - -

**SECTION 10 14 16
PLAQUES (ALTERNATE BID NO. 1)**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies metal plaques.

1.2 RELATED WORK

- A. Wall Mounted Plaque: Section 06 25 00 PREFINISHED TEXTURED WALL PANEL SYSTEM; Section 09 22 16 NON-STRUCTURAL METAL FRAMING; Section 09 29 00 GYPSUM BOARD.
- B. Floor Mounted Plaque: Section 09 67 23.50 RESINOUS TERRAZZO FLOORING.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 00, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Samples: Submit a 1'-0" x 1'-0" sample showing example of specified plaque material, raised lettering, graphics, border, regressed background color and texture and mounting hardware.
- C. Submit full size shop drawing layout of each plaque design scaled from artwork to be provided by Architect.

PART 2 - PRODUCTS

2.1 GENERAL

- A. Manufacturer: Equal to product as manufactured by Metal Arts Division of L & H Manufacturing, Mandan, ND 58554.
- B. Type: Bronze, raised lettering and graphics, single line border satin finish, dark oxidized leatherette textured background, concealed mounting.
- C. Designs:
1. Veterans Administration Seal
 - a. Size: 60 inch diameter x ½ inch thick.
 - b. Location: Set in terrazzo flooring.
 - c. Quantity: One.
 2. Army Seal
 - a. Size: 30 inch diameter x ½ inch thick.
 - b. Location: Wall mounted.
 - c. Quantity: One.
 3. Navy Seal
 - a. Size: 30 inch diameter x ½ inch thick.
 - b. Location: Wall mounted.
 - c. Quantity: One.
 4. Marines Seal
 - a. Size: 30 inch diameter x ½ inch thick.

- b. Location: Wall mounted.
- c. Quantity: One.
- 5. Air Force Seal
 - a. Size: 30 inch diameter x ½ inch thick.
 - b. Location: Wall mounted.
 - c. Quantity: One.
- 6. Coast Guard Seal
 - a. Size: 30 inch diameter x ½ inch thick.
 - b. Location: Wall mounted.
 - c. Quantity: One.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Review conditions of construction and indicate on shop drawings any special rough-in provisions for proper and secure concealed mounting of plaques.
- B. Install plaques securely with concealed mountings at locations indicated on drawings.
- C. Clean and protect installed plaques until completion of project.

- - - END - - -

SECTION 10 20 00
INTERIOR SPECIALTIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies manufactured interior specialties.
- B. Items Specified:
 - 1. Chart Boxes. (CC)
 - 2. TV Brackets. (CC)
 - 3. Adjustable Stainless Steel Wire Shelving. (CC)

1.2 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data:
 - 1. All accessories specified.

1.3 QUALITY ASSURANCE

- A. Each product shall meet, as a minimum, the requirements specified, and shall be a standard commercial product of a manufacturer regularly presently manufacturing items of type specified.
- B. Each accessory type shall be the same and be made by the same manufacturer.
- C. Each accessory shall be assembled to the greatest extent possible before delivery to the site.
- D. Include additional features, which are not specifically prohibited by this specification, but which are a part of the manufacturer's standard commercial product.

1.4 PACKAGING AND DELIVERY

- A. Pack accessories individually to protect finish.
- B. Deliver accessories to the project only when installation work in rooms is ready to receive them.
- C. Deliver products to site in sealed packages of containers; labeled for identification with manufacturer's name, brand, and contents.

1.5 STORAGE

- A. Store products in weathertight and dry storage facility.
- B. Protect from damage from handling, weather and construction operations before, during and after installation in accordance with manufacturer's instructions.

PART 2 - PRODUCTS

2.1 CHART BOXES

- A. Manufacturer: Equal to Carstens, Chicago, IL.
- B. Product: Equal to Half-a-Roo 2000

- C. Cabinet Color: Gray.
- D. End Cap Finish: Light Oak.
- E. Trim Color: Gray.
- F. Accessories:
 - 1. Chart Retainer Bar
 - 2. Slide Alert.
- G. Quantity: See Plans.

2.2 TV BRACKETS

- A. Manufacturer: Equal to Peerless Industries
 - 1. Model: Universal Model No. SP740P (Swivel Mount)
 - a. Construction: Aluminum, Color: Gloss Black.
 - b. Features: VESA 100/200 x 100/200 x 200 mm screen adapter plate, 20° tilt (5° up, 15° down), 180° swivel, adjustable roll (7° in either direction), installation hardware.
 - 2. Model: Universal Model SF650P (Flat Wall Mount)
 - a. Construction: Aluminum, Color: Black.
 - b. Features: Adjustable mounting patterns up to 29.25"W x 17.05"H, all necessary screen attachment hardware.
 - c. Options: Metal stud accessory and integrated security options.

2.3 ADJUSTABLE STAINLESS STEEL WIRE SHELVING

- A. Manufacturer: Equal to Nexel
- B. Type: Adjustable wall mounted
- C. Construction: Stainless steel wire meeting NSF requirements.
- D. Size, quantity and location: See Drawings.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before starting work notify Project Engineer in writing of any conflicts detrimental to installation or operation of units.
- B. Verify with the Project Engineer the exact location of accessories.
- C. Verify VA TV size and model with Project Engineer to determine compatibility of specified bracket before installation.

3.2 INSTALLATION

- A. Set work accurately, in alignment and where shown. Items shall be plumb, level, free of rack and twist, and set parallel or perpendicular as required to line and plane of surface.
- B. Install accessories in accordance with the manufacturer's printed instructions and ASTM F446.
- C. Install accessories plumb and level and securely anchor to substrate. Provide metal backing per Section 05 50 00 to support imposed loads at metal stud partitions.

- D. Install accessories in a manner that will permit the accessory to function as designed and allow for servicing as required without hampering or hindering the performance of other devices.
- E. Align accessories even and level, when installed in battery.
- F. Install accessories to prevent striking by other moving, items or interference with accessibility.

3.3 CLEANING

- A. After installation, clean as recommended by the manufacturer and protect from damage until completion of the project.

- - - E N D - - -

**SECTION 10 21 13
TOILET COMPARTMENTS**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies solid polyethylene toilet partitions and urinal screens.

1.2 RELATED WORK

- A. Overhead structural steel supports for ceiling hung pilasters: Section 05 50 00, METAL FABRICATIONS.
- B. Grab bars and toilet tissue holders: Section 10 28 00, TOILET, BATH, AND LAUNDRY ACCESSORIES.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data: Specified items indicating all hardware and fittings, material, finish, and latching.
- C. Shop Drawings: Construction details at 1/2 scale, showing installation details, anchoring and leveling devices.
- D. Manufacturer's certificate, attesting that zinc-coatings conform to specified requirements.

1.4 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
- B. Federal Specifications (Fed. Spec.):
FF-B-575C.....Bolt, Hexagon and Square
- C. Code of Federal Regulations (CFR):
40 CFR 247.....Comprehensive Procurement Guidelines for
Products Containing Recovered Materials
- D. Commercial Item Descriptions (CID):
A-A-1925.....Shield, Expansion (Nail Anchors)
A-A-60003.....Partitions, Toilet, Complete

PART 2 - PRODUCTS

2.1 FABRICATION:

- A. Solid polyethylene: water resistant; graffiti resistant; non-absorbent; contain a minimum 30 percent post consumer recycled plastic; Class C flame spread rating.
- B. Conform to Fed. CID A-A-60003, except as modified herein.
- C. Fabricate to dimensions shown or specified.
- D. Toilet Enclosures:

1. Type 1, Style B (Ceiling hung).
2. Reinforce panels shown to receive toilet tissue holders or grab bars.
3. Doors, panels and pilasters shall be a minimum of 1" thick and all edges machined to a radius of .250" and all exposed surfaces to be free of saw marks.
4. Dividing panels shall be 55" high and mounted at 14" above finished floor.
5. Doors shall be 55" high and mounted at 14" above finished floor.
6. Pilasters shall be mounted with star-head security pin, stainless steel barrel bolts.
7. Finish of doors, panels and pilasters shall be selected from Manufacturer's Standard Colors equal to Santana Products Poly-Mar Series.

E. Door Hardware:

1. Door Hardware shall be as follows:
 - a. Upper pivots and lower hinges adjustable to hold doors open 30 degrees.
 - b. Latching devices and hinges for handicap compartments shall comply with ADA requirements.
 - c. Wheelchair Toilets:
 - 1) Upper pivots and lower hinges to hold out swinging doors in closed position.
 - 2) Provide U-type door pulls, approximately 100 mm (four inches) long on pull side.
 - d. Hinges shall be integral hinge system.
 - e. Each door to include: (1) door pull, (1) wall stop, (1) coat hook.
 - f. Door strike and keeper shall be fabricated from heavy Aluminum extrusion (6463 - T5 Alloy) with bright-dipped anodized finish, surface mounted and thru-bolted to pilaster.
 - g. Door latch housing shall be fabricated from heavy aluminum extrusion (6463 - T5 Alloy) with bright-sipped anodized finish, surface mounted and thru-bolted to pilaster. Slide bolt and button shall be heavy aluminum with anodized finish.
2. Full-length continuous plastic wall brackets shall be used for all panels-to-pilaster, pilasters-to-wall and panel-to-wall connections.

F. Urinal Screens:

1. Type III, Style E (wall hung).
 - a. With full height U-Type bracket.
 - b. Wall anchor plate drilled for 4 anchors on both sides of screen.
2. Screen 600 mm (24 inches) wide and 1060 mm (42 inches high).

2.2 FASTENERS

- A. Partition Fasteners: CID A-A-60003.
- B. Use expansion bolts, CID A-A-60003, for anchoring to solid masonry or concrete.
- C. Use toggle bolts, CID A-A-60003, for anchoring to hollow masonry or stud framed walls.
- D. Use steel bolts FS-B-575, for anchoring pilasters to overhead steel supports.

PART 3 - EXECUTION**3.1 INSTALLATION**

- A. General:
 - 1. Install in rigid manner, straight, plumb and with all horizontal lines level.
 - 2. Conceal evidence of drilling, cutting and fitting in finish work.
 - 3. Use hex-bolts for through-bolting.
 - 4. Adjust hardware and leave in freely working order.
 - 5. Clean finished surfaces and leave free of imperfections.
- B. Panels and Pilasters:
 - 1. Support panels, except urinal screens, and pilaster abutting building walls near top and bottom by stirrup supports secured to partitions with through-bolts.
 - 2. Secure stirrups to walls with two suitable anchoring devices for each stirrup.
 - 3. Secure panels to faces of pilaster near top and bottom with stirrup supports, through-bolted to panels and machine screwed to each pilaster.
 - 4. Secure edges of panels to edges of pilasters near top and bottom with "U" shaped brackets.
- C. Urinal Screens:
 - 1. Anchor urinal screen flange to walls with minimum of four bolts both side of panel.
 - 2. Space anchors at top and bottom and equally in between.

- - - E N D - - -

**SECTION 10 21 23
CUBICLE CURTAIN TRACKS**

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies cubicle curtain track (C.C.T.)

1.2 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples:
1. One 300 mm (12 inch) long piece of cubicle curtain track with carrier access and end stop.
 2. One clip anchor for fastening track to grid system of acoustical ceilings.
 3. One curtain carrier.
- C. Shop Drawings: Showing layout of tracks and method of anchorage.
- D. Manufacturer's Literature and Data:
1. Cubicle curtain track.

1.3 DELIVERY, STORAGE AND HANDLING

- A. Deliver material in original package marked to identify the contents, brand name, and the name of the manufacturer or supplier.
- B. Store in dry and protected location. Store so as to not bend or warp the tracks.
- C. Do not open packages until contents are needed for installation, unless verification inspection is required.

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
- B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes.
- B456-03(R2009).....Electrodeposited Coatings for Copper Plus Nickel Plus Chromium and Nickel Plus Chromium
- C. The National Association of Architectural Metal Manufacturers (NAAMM):
- AMP 500 Series.....Metal Finishes Manual

PART 2 - PRODUCTS

2.1 CUBICLE CURTAIN TRACKS

- A. Surface mounted:

1. Channel Tracks (Surface Mounted Type): Heavy Duty extruded White PVC vinyl track with smooth inside raceway for curtain carriers, equal to InPro "Whisper Care".
- B. Curtain Carriers: Nylon carriers, with nylon wheels. Equip each carrier with nickel chromium plated brass or stainless steel bead chain and hook assembly. Hook for bead chain may be the same material and finish as the bead chain or may be chromium plated steel. Provide 2.2 carriers for every 300 mm (onefoot) of each section of each track length, plus one additional carrier.
- C. End Stop Connectors, Ceiling Flanges and Other Accessories: Fabricate from the same material with the same finish as the tracks or from nylon.
- D. Hangers and Fittings: Fabricate from the same material with the same finish as the tracks. Hangers may be round or square for channel tracks and round for tubular tracks. Design fittings to be compatible with design of tracks and to safely transmit the track load to the hangers.
- E. At end of each section of track, make provision for insertion and removal of carriers. Design to prevent accidental removal of carrier. Any operating mechanism shall be removable with common tools.

2.2 FASTENERS

- A. Exposed Fasteners, Screws and Bolts: Stainless steel or chromium/nickel plated brass.
- B. Concealed Fasteners, Screws and Bolts: Hot-dip galvanized (except in high moisture areas use stainless steel).
- C. Metal Clips: Anchor curtain tracks to exposed grid of lay-in acoustical tile ceilings, with concealed metal (butterfly) type or two piece snap locking type ceiling clip of high strength spring steel.

2.3 FABRICATION

- A. Form tracks and bends of lengths that will produce the minimum number of joints. Make track sections up to 4800 mm (16 feet) without joints. Form corner bend on a 300 mm (12 inch) radius.
- B. Provide steel anchor plates, supports, and anchors for securing components to building construction.
- C. Form flat surface without distortion.
- D. Shop assemble components and package complete with anchors and fittings.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Install tracks after finish painting and ceiling finishing operations are complete.
- B. Install track level and hangers plumb and securely anchor to the ceiling to form a rigid installation.

- C. Anchor surface mounted curtain tracks directly to exposed grid of lay-in acoustical tile ceilings with suitable fasteners, spaced approximately 600 mm (24 inches) on center.
- D. Securely fasten end stop caps to prevent their being forced out by the striking weight of carriers.
- E. Remove damaged or defective components and replace with new components or repair to the original condition.

3.2 ACCEPTANCE

- A. Track shall be installed neat, rigid, plumb, level and true, and securely anchored to the overhead construction.
- B. Carrier units shall operate smoothly and easily over the full range of travel.

- - - E N D - - -

SECTION 10 26 00
WALL PROTECTION

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies wall guards (crash rails or bumper guards), handrail/wall guard combinations and corner guards.

1.2 RELATED WORK

- A. Armor plates and kick plates: Section 08 71 00, DOOR HARDWARE.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Shop Drawings: Show design and installation details.
- C. Manufacturer's Literature and Data:
 - 1. Handrail/Wall Guard Combinations.
 - 2. Wall Guards.
 - 3. Corner Guards.
- D. Test Report: Showing that resilient material complies with specified fire and safety code requirements.

1.4 DELIVERY AND STORAGE

- A. Deliver materials to the site in original sealed packages or containers marked with the name and brand, or trademark of the manufacturer.
- B. Protect from damage from handling and construction operations before, during and after installation.
- C. Store in a dry environment of approximately 21° C (70 degrees F) for at least 48 hours prior to installation.

1.5 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this specification to extent referenced. Publications are referenced in text by basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - A167-99(R2009).....Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet, and Strip
 - B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
 - D256-06.....Impact Resistance of Plastics
 - D635-06.....Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position
 - E84-09.....Surface Burning Characteristics of Building Materials

- C. The National Association of Architectural Metal Manufacturers (NAAMM):
AMP 500-06.....Metal Finishes Manual
- D. National Fire Protection Association (NFPA):
80-10.....Standard for Fire Doors and Windows
- E. Society of American Automotive Engineers (SAE):
J 1545-05.....Instrumental Color Difference Measurement for
Exterior Finishes.
- F. Underwriters Laboratories Inc. (UL):
Annual Issue.....Building Materials Directory

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum Extruded: ASTM B221, Alloy 6063, Temper T5 or T6.
- B. Resilient Material:
 - 1. Extruded and injection molded acrylic vinyl or extruded polyvinyl chloride meeting following requirements:
 - a. Minimum impact resistance of 1197 ps (25 ft lbs per sq.ft) when tested in accordance with ASTM D256 (Izod impact, ft.lbs. per inch notch).
 - b. Class 1 fire rating when tested in accordance with ASTM E84, having a maximum flame spread of 25 and a smoke developed rating of 450 or less.
 - c. Rated self extinguishing when tested in accordance with ASTM D635.
 - d. Material shall be labeled and tested by Underwriters Laboratories or other approved independent testing laboratory.
 - e. Integral color with all colored components matched in accordance with SAE J 1545 to within plus or minus 1.0 on the CIE-LCH scales.
 - f. Same finish on exposed surfaces.

2.2 CORNER GUARDS

- A. Resilient, Shock-Absorbing Corner Guards: Surface mounted type of 6 mm 1/4-inch corner) formed to profile shown.
 - 1. Snap-on corner guard formed from resilient material, minimum 2 mm (0.078-inch) thick, free floating on a continuous 1.6 mm (0.063-inch) thick extruded aluminum retainer. Provide appropriate mounting hardware, cushions and base plates as required.
 - 2. Provide factory fabricated end closure caps at top and bottom of surface mounted corner guards.
 - 3. Product: Equal to InPro Corporation, 160 Series, Colors:
 - a. WP-1 (Typical): Clam Shell No. 0154.
 - b. WP-2 (Freestanding columns with wallcovering VWC-3): Pepperdust, No. 0119.

2.3 WALL GUARDS AND HANDRAILS

A. Resilient Wall Guards and Handrails:

1. Handrail/Wall Guard Combination: Snap-on covers of resilient material, minimum 2 mm (0.078-inch) thick, shall be free-floated on a continuous, extruded aluminum retainer, minimum 1.8 mm (0.072-inch) thick, anchored to wall at maximum 760 mm (30 inches) on center. Equal to InPro Corporation 1200 Series Ergonomic Profile, Color (WP-1) : Clam Shell, No. 0154.
2. Wall Guards (Crash Rails): Snap-on covers of resilient material, minimum 2.8 mm (0.110-inch) thick, shall be free-floated over 50 mm (two-inch) wide aluminum retainer clips, minimum 2.3 mm (0.090-inch) thick, anchored to wall at maximum 600 mm (24 inches) on center, supporting a continuous aluminum retainer, minimum 1.6 mm (0.062-inch) thick; or, shall be free-floated over a continuous extruded aluminum retainer, minimum 2.3 (0.090-inch) thick anchored to wall at maximum 600 mm (24 inches) on center. Equal to InPro Corporation 1600 Series Ergonomic Profile, Color (WP-1): Clam Shell, No. 0154.
3. Provide handrails and wall guards (crash rails) with prefabricated and closure caps, inside and outside corners, concealed splices, cushions, mounting hardware and other accessories as required. End caps and corners shall be field adjustable to assure close alignment with handrails and wall guards (crash rails). Screw or bolt closure caps to aluminum retainer.

2.4 HIGH IMPACT WALLCOVERING

- A. Fabricate from vinyl acrylic or polyvinyl chloride resilient material minimum 6 mm (0.06 inch) thick designated specifically for interior use. Color (WP-1): Equal to InPro Corporation, Clam Shell, No. 0154.
- B. Provide adhesive as recommended by wall covering manufacturer.

2.5 FASTENERS AND ANCHORS

- A. Provide fasteners and anchors as required for each specific type of installation.
- B. Where type, size, spacing or method of fastening is not shown or specified, submit shop drawings showing proposed installation details.

PART 3 - INSTALLATION

3.1 RESILIENT CORNER GUARDS

- A. Install corner guards on walls in accordance with manufacturer's instructions.

3.2 RESILIENT HANDRAIL WALL GUARD COMBINATIONS AND RESILIENT WALL GUARDS (CRASH RAIL)

- A. Secure guards to walls with mounting cushions brackets and fasteners in accordance with manufacturer's details and instructions.

- - - E N D - - -

SECTION 10 28 00
TOILET AND BATH ACCESSORIES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies manufactured items usually used in dressing rooms, toilets, baths, locker rooms and at sinks in related spaces.
- B. Items Specified:
 - 1. Paper towel dispenser. (CC)
 - 2. Sanitary Waste receptacles. (CC)
 - 3. Toilet tissue dispenser. (CC)
 - 4. Grab Bars. (CC)
 - 5. Shower curtain rods. (CC)
 - 6. Clothes hooks, robe or coat. (CC)
 - 7. Metal framed mirror. (CC)
 - 8. Paper Cup Dispenser.
 - 9. Soap dispenser. (VC)
 - 10. Mop racks. (CC)
 - 11. Napkin/Tampon Vendor. (CC)
 - 12. Baby Changing Station. (CC)

1.2 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data:
 - 1. All accessories specified.
 - 2. Show type of material, gages or metal thickness in inches, finishes, and when required, capacity of accessories.
 - 3. Show working operations of spindle for toilet tissue dispensers.
 - 4. Mop racks.

1.3 QUALITY ASSURANCE

- A. Each product shall meet, as a minimum, the requirements specified, and shall be a standard commercial product of a manufacturer regularly presently manufacturing items of type specified.
- B. Each accessory type shall be the same and be made by the same manufacturer.
- C. Each accessory shall be assembled to the greatest extent possible before delivery to the site.
- D. Include additional features, which are not specifically prohibited by this specification, but which are a part of the manufacturer's standard commercial product.

1.4 PACKAGING AND DELIVERY

- A. Pack accessories individually to protect finish.
- B. Deliver accessories to the project only when installation work in rooms is ready to receive them.
- C. Deliver products to site in sealed packages of containers; labeled for identification with manufacturer's name, brand, and contents.

1.5 STORAGE

- A. Store products in weathertight and dry storage facility.
- B. Protect from damage from handling, weather and construction operations before, during and after installation in accordance with manufacturer's instructions.

1.6 APPLICABLE PUBLICATIONS

- A. Publications listed below form a part of this specification to the extent referenced. Publications are referenced in the text by the basic designation only.
- B. American Society for Testing and Materials (ASTM):
 - A167-99(R2009).....Stainless and Heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip.
 - A176-99(R2009).....Stainless and Heat-Resisting Chromium Steel Plate, Sheet, and Strip
 - A269-10.....Seamless and Welded Austenitic Stainless Steel Tubing for General Service
 - A312/A312M-09.....Seamless and Welded Austenitic Stainless Steel Pipes
 - A653/A653M-10.....Steel Sheet, Zinc-Coated (Galvanized) or Zinc-Iron Alloy-Coated (Galvannealed) by the Hot-Dip Process
 - B221-08.....Aluminum and Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
 - B456-03(R2009).....Electrodeposited Coatings of Copper Plus Nickel Plus Chromium and Nickel Plus Chromium
 - C1036-06.....Flat Glass
 - C1048-04.....Heat-Treated Flat Glass-Kind HS, Kind FT Coated and Uncoated Glass
 - D635-10.....Rate of Burning and/or Extent and Time of Burning of Self Supporting Plastics in a Horizontal Position
 - F446-85(R2009).....Consumer Safety Specification for Grab Bars and Accessories Installed in the Bathing Area.

- D3453-07.....Flexible Cellular Materials - Urethane for
Furniture and Automotive Cushioning, Bedding,
and Similar Applications
- D3690-02(R2009).....Vinyl-Coated and Urethane-Coated Upholstery
Fabrics
- C. The National Association of Architectural Metal Manufacturers (NAAMM):
AMP 500 Series.....Metal Finishes Manual
- D. American Welding Society (AWS):
D10.4-86 (R2000).....Welding Austenitic Chromium-Nickel Stainless
Steel Piping and Tubing
- E. Federal Specifications (Fed. Specs.):
A-A-3002.....Mirrors, Glass
FF-S-107C (2).....Screw, Tapping and Drive
FF-S-107C.....Screw, Tapping and Drive.
WW-P-541E(1).....Plumbing Fixtures (Accessories, Land Use) Detail
Specification

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Aluminum: ASTM B221, alloy 6063-T5 and alloy 6463-T5.
- B. Stainless Steel:
1. Plate or sheet: ASTM A167, Type 302, 304, or 304L, except ASTM A176 where Type 430 is specified, 0.0299-inch thick unless otherwise specified.
 2. Tube: ASTM A269, Alloy Type 302, 304, or 304L.
- C. Stainless Steel Tubing: ASTM A269, Grade 304 or 304L, seamless or welded.
- D. Stainless Steel Pipe: ASTM A312; Grade TP 304 or TP 304L.
- E. Steel Sheet: ASTM A653, zinc-coated (galvanized) coating designation G90.
- F. Glass:
1. ASTM C1036, Type 1, Class 1, Quality q2, for mirrors.

2.2 FASTENERS

- A. Exposed Fasteners: Stainless steel or chromium plated brass, finish to match adjacent surface.
- B. Concealed Fasteners: Steel, hot-dip galvanized (except in high moisture areas such as showers or bath tubs use stainless steel).
- C. Toggle Bolts: For use in hollow masonry or frame construction.
- D. Hex bolts: For through bolting on thin panels.
- E. Expansion Shields: Lead or plastic as recommended by accessory manufacturer for component and substrate for use in solid masonry or concrete.

F. Screws:

1. ASME B18.6.4.
2. Fed Spec. FF-S-107, Stainless steel Type A.

G. Adhesive: As recommended by manufacturer for products to be joined.

2.3 FINISH

A. In accordance with NAAMM AMP 500 series.

B. Anodized Aluminum:

1. AA-C22A41 Chemically etched medium matte, with clear anodic coating, Class I Architectural, 0.7-mil thick.

C. AA-M32 Mechanical finish, medium satin.

1. Chromium Plating: ASTM B456, satin or bright as specified, Service Condition No. SC2.
2. Stainless Steel: NAAMM AMP 503, finish number 4.
3. Ferrous Metal:
 - a. Shop Prime: Clean, pretreat and apply one coat of primer and bake.
 - b. Finish: Over primer apply two coats of alkyd or phenolic resin enamel, and bake.

2.4 FABRICATION - GENERAL

A. Welding, AWS D10.4.

B. Grind dress, and finish welded joints to match finish of adjacent surface.

C. Form exposed surfaces from one sheet of stock, free of joints.

D. Provide steel anchors and components required for secure installation.

E. Form flat surfaces without distortion. Keep exposed surfaces free from scratches and dents. Reinforce doors to prevent warp or twist.

F. Isolate aluminum from dissimilar metals and from contact with building materials as required to prevent electrolysis and corrosion.

G. Hot-dip galvanized steel, except stainless steel, anchors and fastening devices.

H. Shop assemble accessories and package with all components, anchors, fittings, fasteners and keys.

I. Key items alike.

J. Provide templates and rough-in measurements as required.

K. Round and deburr edges of sheets to remove sharp edges.

2.5 PAPER TOWEL DISPENSERS (EQUAL TO GEORGIA PACIFIC 'ENMOTION' IMPULSE 10 AUTOMATED TOWEL DISPENSER)

A. Surface mounted type, 14.8"W X 9.75"D X 13.3"H.

B. Adjustable Settings: Sheet length, sensor distance, time delay and dispense mode.

C. Operation: 4 D-cell alkaline batteries.

D. Fabricate of high impact plastic, color: Translucent Smoke..

2.6 SANITARY WASTE RECEPTACLES (EQUAL TO BRODERICK MATRIX SERIES, MODEL B-5270)

- A. Surface mount.
- B. Durable, high impact Grey ABS with high gloss finish.
- C. Color: Grey

2.7 TOILET TISSUE DISPENSERS (EQUAL TO KIMBERLY-CLARK PROFESSIONAL MICROBAN IN-SIGHT CORELESS STANDARD TISSUE DISPENSER #09604 SMOKE)

- A. Double roll surface mounted type.
- B. Built-in Anti-microbial protection.
- C. Size: 11" x 7.65" x 6"

2.8 GRAB BARS

- A. Fed. Spec WW-P-541/8B, Type IV, bars, surface mounted, Class 2, grab bars and ASTM F446.
- B. Fabricate of stainless steel.
 - 1. Stainless steel: Grab bars, flanges, mounting plates, supports, screws, bolts, and exposed nuts and washers.
- C. Concealed mount, except grab bars mounted on toilet partitions.
- D. Bars:
 - 1. Fabricate from 38 mm (1-1/2 inch) outside diameter tubing.
 - a. Stainless steel, minimum 1.2 mm (0.0478 inch) thick.
 - 2. Fabricate in one continuous piece with ends turned toward walls.3.
 - Continuous weld intermediate support to the grab bar.
- E. Flange for Concealed Mounting:
 - 1. Minimum of 2.65 mm (0.1046 inch) thick, approximately 75 mm (3 inch) diameter by 13 mm (1/2 inch) deep, with provisions for not less than three set screws for securing flange to back plate.
 - 2. Insert grab bar through center of the flange and continuously weld perimeter of grab bar flush to back side of flange.
- F. Flange for Exposed Mounting:
 - 1. Minimum 5 mm (3/16 inch) thick, approximately 75 mm (3 inch) diameter.
 - 2. Insert grab bar through flange and continuously weld perimeter of grab bar flush to backside of flange.
 - 3. Where mounted on toilet partitions, provide three equally spaced, countersunk holes, sized to accommodate 5 mm (3/16 inch) diameter bolts.
- G. In lieu of providing flange for concealed mounting, and back plate as specified, grab rail may be secured by being welded to a back plate and be covered with flange.
- H. Back Plates:
 - 1. Minimum 2.65 mm (0.1046 inch) thick metal.

2. Fabricate in one piece, approximately 6 mm (1/4 inch) deep, with diameter sized to fit flange. Provide slotted holes to accommodate anchor bolts.
3. Furnish spreaders, through bolt fasteners, and cap nuts, where grab bars are mounted on partitions.

2.9 SHOWER CURTAIN RODS

- A. Stainless steel tubing, ASTM A569, minimum 1.27 mm (0.050 inch) wall thickness, 32 mm (1 1/4 inch) outside diameter.
- B. Flanges, stainless steel rings, 66 mm (2 5/8 inch) minimum outside diameter, with 2 holes opposite each other for 6 mm (1/4 inch) stainless steel fastening bolts. Provide a set screw within the curvature of each flange for securing the rod.

2.10 CLOTHES HOOKS-ROBE OR COAT

- A. Fabricate hook units either of chromium plated brass with a satin finish, or stainless steel, using 6 mm (1/4 inch) minimum thick stock, with edges and corners rounded smooth to the thickness of the metal, or 3 mm (1/8 inch) minimum radius.
- B. Fabricate each unit as a double hook on a single shaft, integral with or permanently fastened to the wall flange, provided with concealed fastenings.

2.11 METAL FRAMED MIRRORS

- A. Fed. Spec. A-A-3002 metal frame; stainless steel, type 302 or 304.
- B. Mirror Glass:
 1. Minimum 6 mm (1/4 inch) thick.
 2. Set mirror in a protective vinyl glazing tape.
- C. Frames:
 1. Channel or angle shaped section with face of frame not less than 9 mm (3/8 inch) wide. Fabricate with square corners.
 2. Use 0.9 mm (0.0359 inch) thick stainless steel.
3. Attached Shelf for Mirrors:
 - a. Fabricate shelf of the same material and finish as the mirror frame.
 - b. Make shelf approximately 125 mm (five inches) in depth, and extend full width of the mirror.
 - c. Close the ends and the front edge of the shelf to the same thickness as the mirror frame width.
 - d. Form shelf for aluminum framed mirror as an integral part of the bottom frame member. Form stainless steel shelf with concealed brackets to attach to mirror frame.
- D. Back Plate:

1. Fabricate backplate for concealed wall hanging of either zinc-coated, or cadmium plated 0.9 mm (0.036 inch) thick sheet steel, die cut to fit face of mirror frame, and furnish with theft resistant concealed wall fastenings.
2. Use set screw type theft resistant concealed fastening system for mounting mirrors.

E. Mounting Bracket:

1. Designed to support mirror tight to wall.
2. Designed to retain mirror with concealed set screw fastenings.

2.12 PAPER CUP DISPENSER

- A. Fabricate of stainless steel.
- B. Provide door with either concealed stainless steel pivoting red or piano hinge, and either spring tension cam lock, or tumbler lock, keyed alike when more than one accessory unit is provided and with a cup level refill eight slot in the door front.
- C. Fabricate for flat bottom cups.
- D. Combination (3 to 6 ounce) 90 to 180 milliliters ounce dispenser and disposal unit:
 1. Recessed type, having a capacity of approximately one hundred and seventy cups.
 2. Fabricate as twin stack dispenser unit with an adjustable dispensing mechanism to dispense any size cup.
 3. Fabricate face frames in one piece and doors double pan warp free.
 4. Fabricate recessed disposal unit with a removable waste receptacle having a capacity of not less than 11 liters (3.1 gallons).

2.13 SOAP DISPENSER, AUTOMATIC

- A. Wall mounted, VA provided, Contractor installed.

2.14 MOP RACKS

- A. Minimum 1.0M (40 inches) long with five holders.
- B. Clamps:
 1. Minimum of 1.3 mm (0.050-inch) thick stainless steel bracket retaining channel with a hard rubber serrated cam; pivot mounted to channel.
 2. Clamps to hold handles from 13 mm (1/2-inch) minimum to 32 mm (1-1/4 inch) maximum diameter.
- C. Support:
 1. Minimum of 1 mm (0.0375 inch) thick stainless steel hat shape channel to hold clamps away from wall as shown.
 2. Drill wall flange for 3 mm (1/8 inch) fasteners above and below clamp locations.

- D. Secure clamps to support with oval head machine screws or rivets into continuous reinforcing back of clamps.
- E. Finish on stainless Steel: AMP 503-No. 4.

2.15 NAPKIN/TAMPON VENDOR

- A. Manufacturer: Equal to Bobrick Model B-282 25, 11-7/8"W x 6-1/2"D x 25-7/8"H.
- B. Surface mount. Two dispensing mechanisms in one cabinet, one for boxed napkins, one for tampon packages.
- C. Construction: 18-8S, Type 304 stainless steel, 22 ga. Cabinet, 18 ga. Door, all welded construction, full length stainless steel piano hinge.
- D. Coin mechanisms: Two single coin mechanisms for 25¢ operation.
- E. Locks: Each coin box tumbler lock to be keyed differently than door locks.

2.16 BABY CHANGING STATION

- A. Manufacturer: Equal to Koala Kare Products Model KB110-SSWM.
- B. Horizontal wall mounted, 35-1/4"W x 20"H x 4"D.
- C. Construction: 18 ga. Type 304 stainless steel exterior with FDA approved high density Grey polyethylene antimicrobial interior, reinforced full length steel on steel hinge, built-in liner dispenser, nylon safety strap, two hooks for bags or purses.
- D. Unit shall comply with ADA Regulations, ASTM Antifungal and Antibacterial Standards and shall have universal instruction graphics and safety instructions in 6 languages, and be manufactured in the U.S.A.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Before starting work notify Project Engineer in writing of any conflicts detrimental to installation or operation of units.
- B. Verify with the Project Engineer the exact location of accessories.

3.2 INSTALLATION

- A. Set work accurately, in alignment and where shown. Items shall be plumb, level, free of rack and twist, and set parallel or perpendicular as required to line and plane of surface.
- B. Install accessories in accordance with the manufacturer's printed instructions and ASTM F446.
- C. Install accessories plumb and level and securely anchor to substrate.
- D. Install accessories in a manner that will permit the accessory to function as designed and allow for servicing as required without hampering or hindering the performance of other devices.

- E. Position and install dispensers, and other devices in countertops, clear of drawers, permitting ample clearance below countertop between devices, and ready access for maintenance as needed.
- F. Align mirrors, dispensers and other accessories even and level, when installed in battery.
- G. Install accessories to prevent striking by other moving, items or interference with accessibility.

3.3 CLEANING

- A. After installation, clean as recommended by the manufacturer and protect from damage until completion of the project.

- - - E N D - - -

SECTION 10 44 13
FIRE EXTINGUISHER CABINETS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section covers recessed fire extinguisher cabinets.

1.2 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Manufacturer's Literature and Data: Fire extinguisher cabinet including installation instruction and rough opening required.

1.3 APPLICATION PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced in the text by the basic designation only.
- B. American Society of Testing and Materials (ASTM):
D4802-10.....Poly (Methyl Methacrylate) Acrylic Plastic Sheet

PART 2 - PRODUCTS

2.1 FIRE EXTINGUISHER CABINET

- A. Equal to JL Industries Clear Vu Model No. 2515 with FX Option.
- B. Recessed type with flat trim glazed with vacuum formed clear acrylic bubble. Inside tub dimension 30" x 14" x 4" size to accommodate 7-1/4" diameter multi-purpose dry chemical extinguisher.
- C. Wall opening: 16" x 32-1/8" x 4-7/8".

2.2 FABRICATION

- A. Form body of cabinet from 0.9 mm (0.0359 inch) thick sheet steel.
- B. Fabricate door and trim from 1.2 mm (0.0478 inch) thick sheet steel with all face joints fully welded and ground smooth.
1. Glaze doors with vacuum formed clear acrylic bubble.
 2. Design doors to open 180 degrees.
 3. Provide continuous hinge, pull handle, and adjustable roller catch.

2.3 FINISH

- A. Finish interior of cabinet body with baked-on semigloss white enamel.
- B. Finish door, frame with baked-on semigloss white enamel.

PART 3 - EXECUTION

- A. Install fire extinguisher cabinets in prepared openings and secure in accordance with manufacturer's instructions.
- B. Install cabinet so that bottom of cabinet is 975 mm (39 inches) above finished floor.

- - - E N D - - -

SECTION 10 51 13
METAL LOCKERS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section covers metal lockers and accessories.

1.2 SUBMITTALS

A. Submit in accordance with Section 01 33 23 SHOP DRAWINGS, PRODUCT DATA, and SAMPLES.

B. Manufacturers literature and data: Locker fabrication, finishes, hardware and installation instructions.

PART 2 - PRODUCTS

2.1 LOCKERS

A. Equal to Lyon, Tennsco or Edsal.

1. Size: 12"W x 15"D x 78"H, and 12"W x 12"D x 78"H, double tier, including 6" legs.

2. Body: 24 gage (0.6 mm).

3. Door: 16 gage (1.5 mm).

4. Frames: 16 gage (1.5 mm).

5. Trim: 20 gage (0.9 mm).

6. Finish: Baked Enamel, Color: To be selected from Manufacturer's Standard Colors.

7. Base: Continuous Base cover.

8. Top: Sloped top.

9. Quantity: See Plans

B. For each Locker: One double prong ceiling hook and three single prong wall hooks, metal plate number, rubber bumper, multipoint auto-locking system, stainless steel recessed handle to accommodate padlock. Provide storage shelf at single tier lockers.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install in accordance with manufacturer's instructions.

B. Install lockers plumb and square.

3.2 CLEANING

A. Clean locker interiors and exterior surfaces.

- - - E N D - - -

SECTION 11 14 00
FALL PREVENTION DEVICES

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Section Includes: Roof tie-down system of fall restraint and fall arrest for worker safety.

1.2 REQUIREMENTS

- A. General: Provide structural fall restraint and fall arrest system capable of withstanding loads and stresses within limits and under conditions specified in OSHA and other applicable safety codes. Provide fall prevention anchors permanently attached to roof structure.
- B. Design Requirements: Anchors and accessories comprising system of following types:
1. Roof anchors spaced as indicated, for safety snap connection by individual workers capable of withstanding a 5,000 lb. load or safety factor of 2.
 2. Steel cable lifeline restrained by safety snap to top hoop of anchor at anchor points, top hoop suitable for multiple safety snap connections.
- C. Performance Requirements: System and components tested for resistance of following loads:
1. Fall Restraint: 4 persons simultaneously applied.
 2. Fall Arrest: 1 Person.
 3. Design tie-back anchors to resist at least 5,000 lbf applied in any direction at a height of 12 inches above top of roofing and insulation.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23 SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Product Data: For each type of fall prevention device specified, including manufacturer's standard fabrication details and installation instructions.
- C. Shop Drawings: Show layout, profiles, and anchorage details. Include structural analysis data.
- D. Maintenance Data: Written instructions for maintenance of fall prevention safety devices to be included in the operation and maintenance manual.
- E. Welding certificates.

F. Test Reports:

1. Indicate compliance with required performance requirements.
2. On shop- and field-welded connections. Include data on types of test conducted.

1.4 QUALITY ASSURANCE

- A. Manufacturer Qualifications: Firm having experience in manufacturing fall safety equipment similar to systems specified and exhibiting records of successful in-service acceptability and performance.
- B. OSHA Standards: Comply with Occupational Safety and Health Administration Standards for the Construction Industry 29 CFR § 1926.500 Subpart M (Fall Protection), and with applicable State Administrative Code safety standards for Fall Restraint and Fall Arrest.
- C. Welding: Qualify procedures and personnel for field-welding according to American Welding Society's AWS D1.1-00, Structural Welding Code - Steel.
- D. Testing: Perform quality control tests for each system per manufacturer's requirements.

1.5 COORDINATION

- A. Verify structural deck meets requirements of roof anchor manufacturer.
- B. Coordinate placement of roofing system insulation and flashing to ensure water-tight integrity of roof.

PART 2 - PRODUCTS

2.1 MANUFACTURER

- A. Manufacturer equal to components manufactured by Guardian Fall Protection Inc., Kent, WA., subject to compliance with requirements, configuration and performance specified.

2.2 MATERIALS

- A. Steel Plates, Bars: ASTM A36/A36M-01 carbon structural steel.
- B. Steel Pipe: ASTM A53/A53M-02, Schedule 80, welded and seamless.
- C. Bronze Castings: ASTM B584-00 copper alloy sand castings, Alloy UNS No. C86500 (No. 1 manganese bronze).
- D. Coating: Hot-dip galvanized after fabrication per ASTM A123/A123M-02
- E. Cable: Steel wire cable, 0.375 inch diameter.
- F. Accessories: Anchors and fasteners tested for substrate and structure assembly and approved by fall protection device manufacturer.

2.3 MANUFACTURED ASSEMBLIES

- A. Standard Roof Anchors: Guardian CB Series anchors, each a welded assembly consisting of top U-bolt eyelet, pipe upright, and base plate.
 - 1. Steel Upright: 2-1/2-inch ID steel pipe, height varies to suit roof construction.
 - 2. Steel U-Bolt: 1/2 inch cold rolled steel bar, bent to 2-inch clear diameter U-shape.
 - 3. Base Plate: 3/8 inch steel plate punched with holes for attachment to roof deck.
- B. Lifeline: Continuous steel cable as tested by fall prevention device manufacturer to permit worker mobility and safety.

2.4 FINISH

- A. Standard Roof Anchor Finish: Hot Dipped Galvanized.
 - 1. Galvanized: Hot-dip galvanized after fabrication per ASTM A123/A123M-02.
 - 2. Mill finish.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine framing and substrate and verify conditions comply with structural requirements for system performance.
- B. Notify Project Engineer of unsatisfactory conditions and improper coordination. Proceed with installation of roof anchors only after verifying conditions are satisfactory.

3.2 INSTALLATION

- A. General: Install exterior fall prevention system devices according to manufacturer's instructions and recommendations.
- B. Provide on-site inspection and supervision of installation by factory-trained representative.
- C. Provide adequate anchor heights above insulation to allow minimum 8" high flashing collar with stainless steel clamping ring and sealant at anchor.

3.3 DEMONSTRATION

- A. Instruct Owner's Designated Safety Engineer in proper use of fall prevention safety devices.
- B. Test and adjust system devices. Replace damaged or malfunctioning items.

- - - E N D - - -

SECTION 11 73 00
CEILING MOUNTED PATIENT LIFT SYSTEM (ALTERNATE BID NO. 2)

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Ceiling Mounted Patient Lift Systems for the transfer of physically challenged patients are specified in this section.

1.2 RELATED WORK

- A. Section 01 00 00, GENERAL REQUIREMENTS: Requirements for pre-test of equipment.
- B. Section 26 05 11, REQUIREMENTS FOR ELECTRICAL INSTALLATIONS: General Electrical Requirements and items, which are common to sections of Division 26.

1.3 QUALITY ASSURANCE

- A. Certification for compliance is required for Ceiling Mounted Patient Lift Systems. Certifications shall be provided by an independent third party hired by general contractor and approved by VA who will conduct testing to ensure that the ceiling lift and charging system are safe and in compliance with ISO 10535 & UL 60601-1. Certification paperwork and reports shall be provided to VA.

1.4 SUBMITTALS

- A. Submit in accordance with specification Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA AND SAMPLES.
- B. Certificates of Compliance
- C. Manufacturer's Literature and Data:
 - 1. Lifting Capacity
 - 2. Lifting Speed
 - 3. Horizontal Displacement Speeds
 - 4. Horizontal Axis Motor
 - 5. Vertical Axis Motor
 - 6. Emergency Brake
 - 7. Emergency Lowering Device
 - 8. Emergency Stopping Device
 - 9. Electronic Soft-Start and Soft-Stop Motor Control
 - 10. Current Limiter for Circuit Protection
 - 11. Low Battery Disconnect System
 - 12. Strap Length
 - 13. All equipment anchors and supports. Submittals shall include weights, dimensions, center of gravity, standard connections, manufacturer's recommendations and behavior problems (e.g.,

- vibration, thermal expansion,) associated with equipment or piping so that the proposed installation can be properly reviewed.
- D. Individual room layouts showing location of lift system installation shall be approved before proceeding with installation of lifts.

1.5 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are listed in the text by the basic designation only.
- B. International Organization for Standardization (IOS):
10535-06.....Hoist for the Transfer of Disabled Persons-
Requirements and Test Methods
- C. Underwriters Laboratories (UL):
60601-1(2003).....Medical Electrical Equipment: General
Requirements for Safety
94-2013.....UL Standards for Safety Test for Flammability of
Plastic Materials for Parts in Devices and
Appliances-Fifth Edition
- D. International Electromagnetic Commission (IEC):
801-2(1991).....Electromagnetic Compatibility for Industrial-
Process Measurement and Control Equipment-Part
2: Electromagnetic Discharge Requirements

PART 2 - PRODUCTS

2.1 PATIENT LIFT SYSTEM

- A. Manufacturer: Equal to Arjo Huntleigh.

2.2 CEILING TRACK SYSTEM

- A. The ceiling track shall be made from high strength extruded aluminum T66081-T5 at a thickness of 3/16" (4.8mm). Provide anchor supports at a minimum 3 per linear foot at ceiling substrate. The ceiling track shall be finished with baked enamel paint.

2.3 LIFT UNIT

- A. Maxi Sky 600 and Maxi Sky 1000 (See Drawings for location)
1. Safe working load Maxi Sky 600: 272 kg (600 lbs)
 2. Safe working load Maxi Sky 1000: 455 kg (1000 lbs)
 3. LED indicator for maintenance required
 4. Soft-start and stop motor control
 5. Power on indicator
 6. Emergency brake system
 7. Manual emergency lowering device (located on the motor cab)
 8. Electrical up and down emergency buttons
 9. Emergency stopping device (pull cord) accessible from the ground

10. Low battery indicator (audible and visual LED)
11. Charging indicators
12. Strap length up to 2.3 m (90")
13. Lifting speed:
 - a. 3 cm/sec (1.2"/sec) at 455 kg (1000 lbs)
 - b. 4 cm/sec (1.6"/sec) at 230 kg (500 lbs)
 - c. 7 cm/sec (2.8"/sec) at 0 kg (0 lbs)
14. Batteries: 2x7 Ah will average 150 cycles (loaded at 75 kg/165 lbs)
15. Adjustable horizontal displacement speeds: 10, 14, 15, 20 cm/sec.
16. Automatic return to charge function initiated by user: weight sensor cut-out 9 kg (20 lbs)
17. ASB FR casing (fire retardant)
18. CSA No 601.1, UL No 2601-1 certifications CE marked/ICO 10535
19. Charger unit
20. Power indicator on charging module
21. Clip on charger anywhere on the track
22. 100-240 Vac / 50-60 Hz / 27 Va
23. Protection class IP44 (handset)
24. Infrared remote control

2.4 MOTORS

- A. Vertical Movement-DC Motor
 1. Type: Class A, fully enclosed, permanent magnet.
 2. Rating: 24Vdc, 1.1A, 110W, 4000RPM, 0.3N-m.
 3. Mounting: Secured to chassis.
- B. Horizontal Movement-DC Motor
 1. Type: Fully enclosed, permanent magnet, integral reducer.
 2. Rating: 24Vdc, 1.8A, 62W, 260RPM, 1.0N-m.
 3. Mounting: Secured to chassis.

2.5 BATTERIES

- A. The life cycle (number of charging cycles) for batteries shall be in compliance with IEC 801-2.
- B. Provide rechargeable batteries with up to 120 transfers with a load of 200lbs (74kg) and up to 70 transfers with its maximum load of 440lbs (200kg).

2.6 CHARGER

- A. Charger Input: 100-240 Vac, 50/60 Hz.
- B. Charger Output: 27 Vdc, 1 A max.
- C. Supplemental to the charger provide a clip on charging station with indicator lights.

2.7 STRAPS AND SLING

- A. The straps shall be made of threaded nylon. The straps shall ensure the patient's safety by preventing the patient from falling out of the sling.
- B. The sling shall be made from a polyester/nylon net material that is pliable, breathable and easy to use. The sling shall cradle the body of the patient.

PART 3 - EXECUTION**3.1 INSTALLATION**

- A. Install ceiling mounted patient lift system as per manufacturer's instruction and under the supervision of manufacturer's qualified representative and as shown on drawings.
- B. If the distance in between the suspended ceiling and anchors is more than 18" consult with manufacturer to determine if lateral braces will be required.

3.2 INSTRUCTION AND PERSONNEL TRAINING

- A. Training shall be provided for the required personnel to educate them on proper operation and maintenance for the lift system equipment.

3.3 TEST

- A. Conduct performance test, in the presence of the Project Engineer and a manufacturer's field representative, to show that the patient lift system equipment and control devices operate properly and in accordance with design and specification requirements.

- - - E N D - - -

SECTION 12 24 00
ALUMINUM HORIZONTAL BLINDS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Aluminum horizontal blinds are specified in this section. Blinds shall be furnished complete, including brackets, fittings and hardware.

1.2 QUALITY CONTROL

- A. Manufacturer's Qualification: Horizontal aluminum blind manufacturer shall provide evidence that the manufacture of blinds are a major product, and that the blinds have performed satisfactorily on similar installations.

1.3 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Samples:
 - 1. Horizontal aluminum blinds 300 mm (12 inches) long, including cord showing color and finish.
- C. Manufacturer's literature and data; showing details of construction and hardware for:
 - Horizontal aluminum blinds

1.4 APPLICABLE PUBLICATIONS

- A. The publications listed below form a part of this specification to the extent referenced. The publications are referenced to in the text by the basic designation only.
- B. Federal Specifications (Fed. Spec.):
 - AA-V-00200B.....Venetian Blinds, Shade, Roller, Window, Roller, Slat, Cord, and Accessories
- C. American Society for Testing and Materials (ASTM):
 - A167-99(R2009).....Stainless and heat-Resisting Chromium-Nickel Steel Plate, Sheet and Strip
 - B221/B221M-08.....Aluminum-Alloy Extruded Bars, Rods, Wire, Shapes, and Tubes
 - D635-10.....Rate of Burning and/or Extent and Time of Burning of Self-Supporting Plastics in a Horizontal Position

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Cords for Horizontal Aluminum Blinds: No. 4 braided nylon or No. 4-1/2 braided cotton having not less than 175 pounds breaking strength.
- B. Extruded Aluminum: ASTM B221/B221M.

2.2 HORIZONTAL ALUMINUM BLINDS

- A. Fed. Spec. AA-V-00200, Type II, 25 mm (one inch slats) fabricated of aluminum. Pre-production sample is not required.

2.3 FASTENINGS

- A. Zinc-coated or cadmium plated metal, aluminum or stainless steel fastenings of proper length and type. Except as otherwise specified, fastenings for use with various structural materials shall be as follows:

Type of Fastening	Structural Material
Wood screw	Wood
Tap screw	Metal
Case-hardened, self-tapping screw	Sheet Metal
Screw or bolt in expansion shields	Solid masonry
Toggle bolts	Hollow blocks, wallboard and plaster

2.6 FABRICATION

- A. Fabricate horizontal aluminum blinds to fit dimensions obtained at site.
- B. Product: Blinds to be equal to Levelor Riviera 1" Horizontal Blinds.
1. Headrail: 1" high x 1-9/16" wide U-shaped 0.25" tomized steel.
 2. Slats: Unperforated, 1" x .0085" nominal thickness.
 3. Color: No. 34, Brushed Aluminum.
 4. Finish concealed metal work of head-rails including concealed mechanism, with one shop coat of paint. Do not paint parts that have non-rusting finish, or parts where motion of friction occurs.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Horizontal Aluminum Blinds: Support blinds in level position by brackets and intermediate supports that will permit easy removal and replacement of units without damage to blind, or adjacent surfaces. Provide at least two fasteners for each bracket or other support.
1. Install blinds where indicated on drawings.
 2. Provide one brush (for each 1 to 50 blind) of an approved type, suitable for cleaning blinds.

- - - E N D - - -

SECTION 12 34 50
STAINLESS STEEL CASEWORK

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies stainless steel casework and related accessories, including work surface and base cabinets.

1.2 CASEWORK DESIGN REQUIREMENTS

- A. Flush construction: Surfaces of doors, drawers and panel faces shall align without overlap of case ends, top or bottom rails. Horizontal and vertical case shell members (panels, top rails and bottoms) shall meet in the same plane without overlap.
- B. Slim line styling: Front width of end panels $\frac{3}{4}$ " and front height of top and bottom members 1".
- C. Self-supporting units: Completely welded shell assembly without applied panels at ends, backs or bottoms, so that cases can be used interchangeably or as a single, stand-alone unit.
- D. Interior of case units: Easily cleanable, flush interior. Base cabinets, 30" and wider, with double swinging doors shall provide full access to complete interior without center vertical post.
- E. Drawers: Sized on a modular basis for interchange to meet varying storage needs, and designed to be easily removable in field without the use of special tools.
- F. Case openings: Rabbeted-like joints all four sides of case opening for hinged doors and two sides for sliding doors in order to provide dust resistant case.
- G. Framed glazed doors: Identical in construction, hardware and installation to solid panel doors. Design frame glazed doors to be removable for glass replacement.

1.3 CASEWORK PERFORMANCE REQUIREMENTS

- A. Structural performance requirements: Casework components shall withstand the following minimum loads without damage to the component or to the casework operation:
1. Steel base unit load capacity: 500 lbs. per lineal foot.
 2. Suspended units: 300 lbs.
 3. Drawers in a cabinet: 150 lbs.
 4. Load capacity for shelves of base units: 40 lbs. per square foot.

1.4 SUBMITTALS

- A. Shop Drawings: Provide $\frac{3}{4}$ " = 1'-0" scale elevations of individual and battery of casework units, cross sections, rough-in and anchor

- placements, tolerances and clearances. Indicate relation of units to surrounding walls, windows, doors and other building components. Provide $\frac{1}{4}" = 1'-0"$ rough-in plan drawings for coordination with trades. Rough-in shall show free area.
- B. Product Data: Submit manufacturer's data for each component and item of laboratory equipment specified. Include component dimensions, configurations, construction details, joint details, and attachments, utility and service requirements and locations.

1.5 QUALITY ASSURANCE

- A. Single source responsibility: Casework, work surfaces, and accessories shall be manufactured or furnished by a single manufactured casework company.
- B. Manufacturer's qualifications: Modern plant with proper tools, dies, fixtures and skilled workmen to produce high quality casework and equipment.
1. Experience in manufacture of stainless steel casework and equipment of type specified.
 2. Installations of equal or larger size and requirements.
- C. Installer's qualifications: Factory trained and/or certified by the manufacturer.

1.6 DELIVERY, STORAGE AND HANDLING

- A. Schedule delivery of casework and equipment so that spaces are sufficiently complete that material can be installed immediately following delivery.
- B. Protect finished surfaces from soiling or damage during handling and installation. Keep covered with polyethylene film or other protective coating.
- C. Protect all work surfaces throughout construction period with $\frac{1}{4}"$ corrugated cardboard completely covering the top and securely taped to edges. Mark cardboard in large lettering "No Standing".

1.7 PROJECT CONDITIONS

- A. Do not deliver or install equipment until the following conditions have been met:
1. Windows and doors are installed and the building is secure and weather tight.
 2. Ceiling, overhead ductwork and lighting are installed.
 3. All painting is completed and floor tile is installed.

PART 2- PRODUCTS

2.1 MANUFACTURER

- A. Design, materials, construction and finish of casework specified is the minimum acceptable standard of quality for stainless steel casework. Product equal to Thermo Fisher Scientific - Hamilton, 1316 - Street, Two Rivers, WI 54241, which is the basis of this specification.

2.2 CASEWORK MATERIALS

- A. Sheet steel: Mild, cold rolled and leveled #304 stainless steel. (#4 mill finish on all exposed surfaces).
- B. Minimum gauges:
 - 1. 20 gauge: Solid door interior panels, drawer fronts, scribing strips, filler panels, enclosures, drawer bodies, shelves, and security panels.
 - 2. 18 gauge: Case tops, ends, bottoms, bases, backs, vertical posts, uprights, glazed door members, door exterior panels and access panels.
 - 3. 16 gauge: Top front rails, top rear gussets, intermediate horizontal rails.
 - 4. 14 gauge: Drawer suspensions, door and case hinge reinforcements and front corner reinforcements.
- C. All spot welds shall be ground smooth, cleaned and polished with no visible markings or grind marks.

2.3 CASEWORK FABRICATION

- A. Base Units and Cases:
 - 1. Base units: End panels and back reinforced with internal reinforcing front and rear posts.
 - 2. Posts: Front post fully closed with full height reinforcing upright. Shelf adjustment holes in front and rear posts shall be perfectly aligned for level setting, adjustable to ½" o.c.
 - 3. Secure intersection of case members with spot and arc welds. Provide gusset reinforcement at front corners.
 - 4. Base unit backs: Provide fixed backs at all drawer and cupboard units.
 - 5. Bottoms: Base units shall have one piece bottom with front edge formed into front rail, rabbeted as required for swinging doors and drawers.
 - 6. Top rail for base units: Interlock with end panels, flush with front of unit.

7. Horizontal intermediate rails: Recessed behind doors and drawer fronts.
 8. Base for base units: 4" high x 3" deep with formed steel base and 11 ga. die formed stainless steel gussets at corners. Provide 3/8" diameter leveling screw with integral bottom flange of minimum 0.56 sq. in. area at each corner, accessible through openings in top space.
- B. Drawers:
1. Solid panel drawers: 3/4" thick, double wall, telescoping box stainless steel construction and sound deadened.
 2. Drawer bodies: Bottom and sides formed into one-piece center section with bottom and sides coved and formed top edges. Front and back panels spot welded to center section.
 3. Drawer suspension: SEFA 8 Accuride (or equal) 150-pound full extension drawer slides, stainless steel.
 4. Provide drawer with rubber bumpers. Friction centering devices are not acceptable.
 5. Provide security panels for drawers with keyed different locks.
 6. File drawers: Provide with 150# full extension slides for full access and operation.
- C. Doors:
1. Solid panel doors: 3/4" thick, double wall, telescoping box stainless steel construction with interior polished and sound deadened. Reinforce interior of front panel with welded stainless steel hat channels. Hinges with screws to internal 14 gauge reinforcing in case and door. Hinges shall be removable; welding of hinges not acceptable. Doors shall close against rubber bumpers.
- D. Shelves:
1. Form front and back edges down and back 3/4". Form ends down 3/4".
 2. Reinforce shelves over 36" long with hat channel reinforcement the full width of shelf.
 3. Pull out shelves: Same suspension as specified for drawers.
- E. Base molding: 4" high, to be furnished and installed by flooring contractor.
- F. Hardware:
1. Drawer and hinged door pulls: Stainless steel wire pull - screws attached on 4" centers.
 2. Hinges: Institutional type, five knuckle projecting barrel hinges, minimum 2-1/2" long, type 302 or 304 stainless steel. Provide two hinges for doors up to 36" high; three hinges for

doors over 36" high. Drill each leaf for three stainless steel screw attachment to door and frame.

3. Door catches: Adjustable type, spring actuated nylon roller catches.
4. Elbow catches: Spring type of cadmium plated steel, with strike of suitable design.
5. Shelf clips: Die formed, stainless steel designed to engage in shelf adjustment holes.

2.4 STAINLESS STEEL WORK SURFACE

A. Material:

1. Stainless steel tops with sinks are made from 14 gauge Type 304 stainless steel with #4 finish.
2. Tops with welded field joints are made from 14 gauge Type 304 stainless steel with #4 finish.
3. All other tops are made from 16 gauge Type 304 stainless steel with #4 finish.

B. Tops: Form tops with 1" lip and ½" return flange, and provide 16 gauge stainless steel reinforcing channels applied to underside as required for rigidity and sound dampening. Form edges, flanges and curbs integrally with top, from one sheet of metal.

C. Sink tops: Provide seamless, die formed 3/16" high integral marine edges at sink tops. Unless otherwise noted, provide plain edges at all other tops. Coat underside of all with sound dampening material.

D. Sink bowls: All sink bowls are made from 16 gauge Type 304 stainless steel. Electrically weld stainless steel bowls to opening in top. Grind welds flush and polish to a satin finish to produce an integral unit with invisible joint line. Cover underside of sink bowls with sound dampening material.

E. Joints: Electrically weld all shop joints; grind smooth and polish. Design field joints to be mechanically bolted and supported full length, resulting in a hair line seam with flat, level surfaces each side of joint.

F. Sound dampening material: Material shall be waterborne and non-flammable in its liquid state. Material to contain clay, which will act as a flame retardant. Material shall contain no volatile organic compounds (VOC). Film thickness of spray-applied product shall be approximately 20 mil.

PART 3 - EXECUTION

3.1 EXAMINATION

A. Casework installation:

1. Set casework components plumb, square, and straight with no distortion and securely anchored to building structure. Shim as required using concealed shims.
 2. Bolt continuous cabinets together with joints flush, tight and uniform, and with alignment of adjacent units within 1/16" tolerance.
 3. Secure wall cabinets to solid supporting material, not to plaster, lath or gypsum board.
 4. Abut top edge surfaces in one true plane. Provide flush joints not to exceed 1/8" between top units.
- B. Work surface installation:
1. Where required due to field conditions, scribe to abutting surfaces.
 2. Only factory prepared field joints, located per approved shop drawings, shall be permitted. Secure joints in field, where practicable, in the same manner as in factory, with dowels, splines, adhesive or fasteners recommended by manufacturer.
 3. Secure work surfaces to casework and equipment components with material and procedures recommended by the manufacturer.

3.2 ADJUSTING

- A. Repair or remove and replace defective work, as directed by Project Engineer upon completion of installation.
- B. Adjust doors, drawers, hardware, fixtures and other moving or operating parts to function smoothly.

3.3 CLEANING

- A. Clean shop finished casework, repair as required.
- B. Clean countertops with diluted dishwashing liquid and water leaving tops free of all grease and streaks. Use no wax or oils.

3.4 PROTECTION OF FINISHED WORK

- A. Provide all necessary protective measure to prevent exposure of casework and equipment from exposure to other construction activity.
- B. Advise contractor of procedures and precautions for protection of material, installed casework and fixtures from damage by work of other trades.

-----END-----

SECTION 14 21 00
ELECTRIC TRACTION ELEVATORS

PART 1 - GENERAL

1.1 DESCRIPTION

- A. This section specifies installing new hoistway entrances at Elevators 7 & 8, at First Floor, north side of hoistway to include the following:
 - 1. Operating devices and face plates at hoistway landing (Keyed for new opening at all locations.)
 - 2. Medical Emergency Service Switch
 - 3. Corridor position indicators
 - 4. Corridor lanterns
 - 5. Hoistway access switch
 - 6. Hoistway Entrances (Entrance frames, sills, hanger supports, hangers, tracks, angle struts, door panels, fascia plates, toe guards, hardware, bumpers, site guards and wall anchors.)
 - 7. Electric power door operators.
 - 8. Electric interlocks.
- B. The work under this section must be scheduled so that only one of the two cars is out of service at any time. Coordinate work with Project Engineer.

1.2 QUALITY CONTROL

- A. Qualifications:
 - 1. Approval by the Contracting Officer is required of products or services of proposed manufacturer, suppliers, and installers and will be contingent upon submission by contractor of a certificate stating the following:
 - a. Manufacturer is currently and regularly engaged in manufacturing of elevator equipment as one of his principal products.
 - b. Installer has technical qualifications of at least three years of successful experience, trained supervisory and installation personnel, and facilities to install elevator equipment specified herein.
 - 2. All elevator components shall be the product of the same manufacturer.

1.3 APPLICABLE PUBLICATION

- A. The publications listed below form a part of this specification. Elevator installation shall meet the requirements of the latest editions published and adopted by the United States Department of Veterans Affairs on the date contract is signed.
- B. Federal Specifications (Fed. Spec.):

- J-C-30B.....Cable and Wire, Electrical (Power, Fixed Installation)
- W-C-596F.....Connector, Plug, Electrical; Connector, Receptacle, Electrical
- W-F-406E.....Fittings for Cable, Power, Electrical and Conduit, Metal, Flexible
- HH-I-558C.....Insulation, Blankets, Thermal (Mineral Fiber, Industrial Type)
- W-F-408E.....Fittings for Conduit, Metal, Rigid (Thick- Wall and Thin-wall (EMT) Type)
- RR-W-410.....Wire Rope and Strand
- TT-E-489J.....Enamel, Alkyd, Gloss, Low VOC Content
- QQ-S-766Steel, Stainless and Heat Resisting, Alloys, Plate, Sheet and Strip
- C. International Building Code (IBC)
- D. American Society of Mechanical Engineers (ASME):
 - A17.1-07.....Safety Code for Elevators and Escalators
 - A17.2-07.....Inspectors Manual for Electric Elevators and Escalators
- E. National Fire Protection Association:
 - NFPA 13-10.....Standard for the Installation of Sprinkler Systems
 - NFPA 70-11.....National Electrical Code (NEC)
 - NFPA 72-10.....National Fire Alarm and Signaling Code
 - NFPA 101-09.....Life Safety Code
 - NFPA 252-08.....Fire Test of Door Assemblies
- F. American Society for Testing and Materials (ASTM):
 - A1008/A1008M-10.....Steel, Sheet, Cold Rolled, Carbon, Structural, High-Strength Low-Alloy and High Strength Low-Alloy with Improved Farability
 - E1042-02(R2008).....Acoustically Absorptive Materials Applied by Trowel or Spray
- G. Gauges:
 - For Sheet and Plate: U.S. Standard (USS)
 - For Wire: American Wire Gauge (AWG)
- H. American Welding Society (AWS):
 - D1.1-10.....Structured Welding Code Steel
- I. National Electrical Manufacturers Association (NEMA):
 - LD-3-05.....High-Pressure Decorative Laminates
- J. Underwriter's Laboratories (UL):
 - 486A-03.....Safety Wire Connectors for Copper Conductors
 - 797-07.....Safety Electrical Metallic Tubing
- K. Institute of Electrical and Electronic Engineers (IEEE)

L. Regulatory Standards:

Uniform Federal Accessibility Standards
Americans with Disabilities Act

1.4 SUBMITTALS

- A. Submit in accordance with Section 01 33 23, SHOP DRAWINGS, PRODUCT DATA, AND SAMPLES.
- B. Before executing any work, furnish information sufficient to evidence full compliance with contract requirements on proposed items.
- C. Shop Drawings:
 - 1. Drawings of hoistway entrances and doors showing details of construction and method of fastening to the structural members of the building.
 - a. Sill details including sill support.

1.5 WARRANTY

- A. Submit all labor and materials furnished in connection with elevator hoistway entrance system and installation to terms of "Warranty of Construction" articles of FAR clause 52.246-21. Warranty shall commence upon final inspection and completion of performance test and upon full acceptance of the installation and shall concur with the length of the maintenance contract.
- B. If it becomes evident during warranty period that any device is not functioning properly or in accordance with specification requirements, or if in the opinion of the Contracting Officer, excessive maintenance and attention must be employed to keep device operational, device shall be removed and a new device meeting all requirements shall be installed as part of work until satisfactory operation for installation is obtained. Period of warranty shall start anew for such parts from date of acceptance of each new installation performed, in accordance with foregoing requirements.

PART 2 - PRODUCTS

2.1 MATERIALS

- A. Where stainless steel is specified, it shall be corrosion resisting steel complying with Fed. Spec. QQ-S-766, Class 304 or 316, Condition A with Number 4 finish (150 grit) on exposed surfaces. Stainless steel shall have the grain of belting in the direction of the longest dimension and all surfaces shall be perfectly smooth and without waves. During erection, all stainless steel surfaces shall be protected by suitable material.
- B. Where cold rolled steel is specified, it shall be low-carbon steel rolled to stretcher leveled standard flatness, complying with ASTM A109.

2.2 MANUFACTURED PRODUCTS

- A. Materials, devices, and equipment furnished shall be of current production by manufacturers regularly engaged in the manufacture of such items.
- B. When two or more units of same class of materials, devices or equipment are required, these units shall be products of one manufacturer.
- C. Manufacturers of equipment assemblies which include components made by others shall assume complete responsibility for the final assembled unit.
 - 1. All components of an assembled unit shall be products of the same manufacturer.
 - 2. Parts which are alike shall be the product of a single manufacturer.
 - 3. Components shall be compatible with each other and with the total assembly for the intended service.
- D. If the elevator equipment to be installed is not known to the Contracting Officer, the contractor shall submit drawings in triplicate for approval, showing all details or demonstrate to the satisfaction of the Contracting Officer that the equipment to be installed is in strict accordance to the specifications.
- E. Welding at the project site shall be made by welders and welding operators who have previously qualified by test as prescribed in American Welding Society Publication AWS D1.1 to perform type of work required.
- F. The elevator equipment, shall be the product of one manufacturer of established reputation, except that any of the above items may be the products, either wholly or in part, of any manufacturer of established reputation provided such items are capably engineered and produced under coordinated specifications to insure a first class, safe and smooth operating system.
- G. Where key-operated switches and/or key-operated cylinder locks are furnished in conjunction with any component of this elevator installation, furnish four keys for each individual switch or lock. Barrel keys or switches not acceptable. Attach each key to a tag bearing a stamped or etched legend identifying its purpose. Engrave tags and imprint "Property of U.S. Government" on reverse side.
- H. Provide keys and systems that are compatible with and use the Best Corporation 7 pin cores currently standard at the Fargo VA.

2.3 CONDUCTORS

- A. Unless otherwise specified, conductors, exclusive of traveling cables, shall be stranded or solid coated annealed copper in accordance with Fed. Spec. J-C-30 for either Type RHW or THW. Where 16 and 18 AWG are

permitted by NEC, either single conductor cable in accordance with Fed. Spec. J-C-580 for Type TF, or multiple conductor cable, may be used provided the insulation of single conductor cable and outer jacket of multiple conductor cable is flame retardant and moisture resistant. Multiple conductor cable shall have color coding or other suitable identification for each conductor. Conductors for control boards shall be in accordance with NEC. Permit no joints or splices in wiring except at outlets. Tap connectors may be used in wireways provided they meet all UL requirements.

- B. All wiring must test free from short circuits or grounds. Insulation resistance between individual external conductors and between conductors and ground shall be not less than one megohm.
- C. Where size of conductors is not given, capacity shall be such that maximum current shall not exceed limits prescribed by NEC.
- D. Provide equipment grounding. Ground conduits, supports, controller enclosures, motors, platform and car frames, and all other non-current conducting metal enclosures for electrical equipment in accordance with NEC. The ground wires shall be copper, green, insulated and sized as required by NEC. Bond the grounding wires to all junction boxes, cabinets, and wire raceways.
- E. Terminal connections for all conductors used for external wiring between various items of elevator equipment shall be solderless pressure wire connectors in accordance with Fed. Spec. W-S-610. The Contractor may, at his option, make these terminal connections on No. 10 or smaller conductors with approved terminal eyelets set on the conductor with a special setting tool, or with an approved pressure type terminal block. Terminal blocks using pierce-through serrated washers are not acceptable.

2.4 ELEVATOR CAR OPERATING PANELS

- A. Remove and replace as required to include push buttons to match existing for new first floor rear entrances.

2.5 FIRE SERVICE

- A. Provide Fire Service as per ASME A17.1.
- B. Smoke Detectors:
 - 1. New detection devices are provided by Division 26, ELECTRICAL at new First Floor Elevator Lobby for actuation of Elevator Phase I "Fire Service" response.
 - 2. Existing First Floor Lobby has independent smoke detection.

2.6 OPERATING DEVICE FACEPLATES

- A. Match existing operating device faceplates at Elevators 7 and 8.

- B. Fabricate faceplates for all elevator operating and signal devices from not less than 3 mm (1/8 inch) thick flat stainless steel with all edges beveled at least 15 degrees. Install all faceplates flush with surface upon which they are mounted.
- C. Corridor pushbutton faceplates shall be at least 65 mm (2-1/2 inches) wide by 200 mm (8 inches) high. The centerline of the landing pushbutton fixtures shall be 1050 mm (42 inches) above the corridor floor.
- D. Fasten all corridor operating device and signal device faceplates with non-corrosive white metal spanner head or bristol head tamperproof screws.
- E. Design corridor pushbutton faceplates so that pressure on pushbuttons shall be independent of pressure on pushbutton contacts.
- F. Engraved legends in faceplates shall have lettering 6 mm (1/4 inch) high filled with black paint.

2.7 OPERATING DEVICES AT HOISTWAY LANDINGS

- A. Call buttons to match existing equivalent to Vandel Resistant Epco Survival Series with brushed brass push button with red L.E.D. illumination.
- B. Each button shall contain an integral registration light which shall illuminate upon registration of a call and shall extinguish when that call is answered.
- C. The two risers of landing call buttons shall be cross-connected so that either "UP" or either "DOWN" button at a particular floor shall have the capability of registering a call to that floor for the entire elevator group. Registration of a landing call shall illuminate both "UP" or both "DOWN" buttons simultaneously, and upon satisfaction of that call, both buttons shall be extinguished simultaneously.
- D. If a landing button is operated while the car and hoistway doors are closing at that floor, the call shall be registered for the next available elevator. Call so registered shall be canceled if closing doors are reopened by means of "DOOR OPEN" button or infrared curtain unit.
- E. Floor position indicators shall be located in hall station, indication lights shall be LED type, not incandescent or dot matrix.
- F. Provide two position key operated "independent service" transfer switch with two positions marked "on" and "off" at Elevator 7 and 8 hall station.

2.8 MEDICAL EMERGENCY SERVICE

- A. Provisions shall be made for calling elevators 7 and 8 to the new 1st floor Lobby on an emergency basis operating independently from the

- dispatch signals and landing call signals. Provide a two-position, key-operated, momentary contact, spring return switch at the 1st floor.
- B. Install key switch in a steel wall box with a flush stainless steel faceplate located immediately above the landing call button fixture, or mounted in the floor landing pushbutton fixture box, above the pushbuttons.
 - C. Landing key switches shall be momentary pressure-spring return to "OFF" position. Provide a call registered light jewel adjacent to key switch. The landing key switch and the "MEDICAL EMERGENCY" key switch in the car shall not be operable for any other purpose in the hospital.
 - D. When switch is activated at any floor, the call registered light jewel shall illuminate at the floor only, and the elevator group supervisory control system shall instantly select the nearest available elevator in group service to respond to the medical emergency call. Immediately upon selection, all car calls within that car shall be cancelled. Further, transfer any landing calls which had previously been assigned that car to another car. If the selected car is traveling away from the medical emergency call, it shall slow down and stop at the nearest floor, maintain closed doors, reverse direction and proceed nonstop to the medical emergency call floor. If the selected car is traveling toward the medical emergency call floor, it shall proceed to that floor nonstop unless, at the time of selection, it happened to be slowing down for a stop, in which event the car shall stop, maintain doors closed, and start immediately toward the medical emergency floor.
 - E. Arriving at the medical emergency floor, the car shall remain with doors open for an adjustable time interval of 10 to 30 seconds. After this interval has expired and the car has not been placed on medical emergency operation from within the car, the car shall automatically return to normal service.
 - F. Any car in the group which is in group service may be selected. Additional medical emergency calls, as they are registered in the system, shall cause additional cars to respond as described below, always on the basis of one medical emergency call per car.
 - G. All of the key switches in the "MEDICAL EMERGENCY SERVICE SYSTEM" for all elevators shall operate from the same key. The medical emergency call service key shall not operate any other key switch in the elevator system, nor shall any other key required by the elevator system be able to operate the medical emergency call service switches.
 - H. Should all the cars be out of service and unable to answer emergency call, the call registered light shall not illuminate.

- I. Each switch faceplate shall have legible indelible legends engraved or etched to indicate its "IDENTITY" and "POSITIONS". All letters in faceplates shall be not less than 6 mm (1/4 inch) high, filled with black paint.
- J. Fire Service elevators on medical service shall remain on medical service, complete medical service and then go back to automatic and return to main or alternate fire service floor.

2.9 CORRIDOR POSITION INDICATORS

- A. Provide LED digital position indicators directly in hall station or above hoistway landing entranceway. Indicator cover plates shall consist of faceplates of stainless steel. Numerals shall be not less than 50 mm (2 inches) high. Cover plates shall be readily removable for relamping. In addition to the numerals, each indicator shall have a "WHITE" up arrow and a "RED" down arrow. The appropriate direction arrow shall be illuminated during entire travel of car in corresponding direction. When car is standing at landing with no direction established, arrows shall not be illuminated. Provide an electric lamp in each compartment to indicate the position and direction of the car by illuminating the proper numeral and arrow. Each corridor position indicator shall be equipped with a clearly audible gong which shall sound once for "UPWARD" bound car and twice for "DOWNWARD" bound car. Audible signal shall not sound when a car passes the floor without stopping.

2.10 CORRIDOR LANTERNS

- A. Provide each car with a corridor lantern digital LED readout or lense mounted over the hoistway entrance. Provide each terminal landing with a single "UP" or "DOWN" 50mm (2 inch) arrow lantern and each intermediate landing with "UP" and "DOWN" lanterns. Each lens shall be illuminated with L.E.D. illumination of proper intensity, so shielded to illuminate individual lens only. Upper lens in each lantern shall be illuminated white to indicate "UP" travel and lower lens red or white to indicate "DOWN" travel. Connect lanterns to signal in advance of approach and direction of stopping car whether or not corridor button has been operated at the floor. Hall calls shall receive immediate assignment to individual cars and hall lantern shall sound and illuminate. Corridor lanterns shall not be illuminated when a car passes a floor without stopping. Each lantern shall be equipped with a clearly audible electronic tone which shall sound once for "UPWARD" bound car and twice for "DOWNWARD" bound car. Audible signal shall not sound when a car passes the floor without stopping. Provide adjustable sound level on audible signal.

2.11 HOISTWAY ENTRANCES FOR PASSENGER AND SERVICE ELEVATORS

- A. Provide entrance doors and door frames of stainless steel. Complete entrances with sills, hanger supports, hangers, tracks, angle struts, unit frames, door panels, fascia plates, toe guards, hardware, bumpers, sight guards, and wall anchors.
- B. Provide one piece extruded aluminum sills with non-slip wearing surface, grooved for door guides and recessed for fascia plates. Sills shall have overall height of not less than 19 mm (3/4 inch), thickness of not less than 3 mm (1/8 inch), and set true, straight and level, with hoistway edges plumb over each other, and top surfaces flush with finished floor. Grout sills full length after installation.
- C. Construct hanger supports of not less than 4.5 mm (3/16 inch) thick steel plate, and bolted to strut angles.
- D. Structural steel angles 5 inch by 5 inch by 1/2 inch shall extend from top of sill to bottom of floor beam above, and shall be securely fastened at maximum 457mm (18 inch) O.C. and at each end with two bolts.
- E. Provide jambs and head soffits, of not less than 14-gauge stainless steel, for entrances. Jambs and head soffits shall be combination buck and jamb welded construction, and provided with three anchors each side. Side jambs shall be 'bull nose' type. Radius of curvature shall be about 90 mm (3-1/2 inches). Head jamb shall be square type, and shall overhang corridor face of side jambs by 6 mm (1/4 inch). Rigidly fasten jambs and head soffits to building structure. Provide jambs with suitable type of protective covering. After installation, protect jambs and head soffits with wood framing to prevent damage to finish. Solidly grout jambs.
- F. Provide hoistway entrance with flush center opening hoistway doors for Elevators No. 7 and 8. Door panels shall be stainless sheet steel, flush type construction, and not less than 32 mm (1-1/4 inches) thick. Top and bottom of door panels shall have continuous stiffener channels welded in place. Reinforcement of the door panels shall be approximately 1.0 mm (0.04 inch) in thickness and of the hat section type. At bottom of each panel, provide two accurately fitted removable laminated phenolic or other approved material, guides with fire stops. Reinforce each door panel for hangers, interlock mechanism, power door operator and closer. One door panel for each entrance shall bear a BOCA label, Underwriters' label, or, in lieu of this, other labels may be furnished provided they are based on fire test reports and factory inspection procedures acceptable to Contracting Officer. Fasten sight guard of 14-gauge metal, extending full height of panel, to leading edge of each panel of center opening doors. Door finish shall be stainless steel.

- G. Provide 14-gauge sheet steel fascia plates in hoistway to extend vertically from head of hanger support housing to sill above. Plates shall be the same width as the door opening of elevator and adequately reinforced to prevent waves and buckles. Below bottom terminal landing and over upper terminal landing provide suitable toe guard and dust cover beveled back to wall and adequately fastened. Provide cover plate the width of the door opening on hanger pockets. Where rear openings are used, provide as required by ASME A17.1.
- H. Provide hangers for hoistway door panels and provide relating devices to transmit motion from one door panel to the other. Fasten the hangers to the door sections. Provide reinforcements at the point of attachment. The hanger shall have provisions for vertical and lateral adjustment. The hanger shall be of the two-point suspension type, consisting of nylon or other non-metallic tired sheaves fitted with dustproof, grease packed ball or roller bearings mounted on a malleable iron or steel bracket. The hanger sheaves shall operate at a relatively low rotational speed, and shall roll on a high-carbon, cold-rolled or drawn steel track shaped to permit free movement of sheaves without regard to vertical adjustment of sheave, bracket or housing. Beneath the track and each hanger sheave, provide a hardened steel up-thrust roller capable of withstanding a vertical thrust equal to the carrying capacity of adjacent upper sheave. The up-thrust shall have fine vertical adjustments, and the face of the roller shaped so as to permit free movement of the hanger sheave. The up-thrust roller shall have ball or roller bearings. Provide the hanger sheaves with steel fire stops to prevent disengagement from tracks.
- I. Do not use hangers that are constructed integrally with the door panels.
- J. Provide raised numerals on cast, rear mounted plates for all openings. Numerals shall be a minimum of 50 mm (2 inches) high, located on each side of entrance frame, with centerline of 1500 mm (5 feet) above the landing sill. The numerals shall also contain Braille.
- K. Provide silk screened or die cut vinyl lettering on each elevator entry door designating elevator number being entered. Match existing letter style, size, type and color.

2.12 ELECTRIC POWER DOOR OPERATORS, PASSENGER AND SERVICE ELEVATORS

- A. Provide only door operators that require no special tools or codes for adjustments. Units shall be high-speed, heavy duty, alternating-current or direct current, master-type, door operator to automatically open the car and hoistway doors simultaneously when the car is leveling, and automatically close the doors simultaneously at the expiration of the door-open timing. Provide solid-state door control with closed loop

circuitry to constantly monitor and automatically adjust door operation based upon velocity, position, and motor current. Motor shall be of the high-internal resistance type, capable of withstanding high currents resulting from stall without damage to the motor. The door operator shall be capable of opening a car door and hoistway door simultaneously, at a minimum speed of not less than .762 m (2.5 feet) per second. The closing speed of the doors shall be .3 m (one foot) per second. A reversal of direction of the doors from the closing to opening operation, whether initiated by obstruction or the door "OPEN" button, shall be accomplished within no more than 38 mm (1-1/2 inches) maximum of door movement. Particular emphasis is to be placed on obtaining quiet interlock and door operation, and smooth, fast, dynamic braking for door reversals and stopping of the doors reversals, and stopping of the door extremes of travel. Construct all levers, operating the doors, of heavy steel members, and all pivot points shall have ball or roller bearings. Use electric power to open and close the doors. Auxiliary automatic door closers required under Rule 2.11.3.1 of ASME A17.1 shall be torsion spring type.

- B. Design the door operator so that in case of interruption or failure of the electric power from any cause, it shall permit emergency manual operation of both the car door and the hoistway door from within the car, at door zone only. Out of door zone, doors are restricted to 100 mm (4 inch) opening.
 - 1. It shall not be possible for the doors to open by power unless the elevator is within the leveling zone.
 - 2. Provide infrared curtain unit. The device shall cause the car and hoistway doors to reverse automatically to the fully-open position should the unit be actuated while the doors are closing. Unit shall function at all times when the doors are not closed, irrespective of all other operating features. The leading edge of the unit shall have an approved black finish.
- C. Should the doors be prevented from closing for more than predetermined adjustable interval of 20 to 45 seconds by the interruption or failure of the light rays, the photo-electric door control shall be rendered inoperative and the doors shall close at reduced speed while a nudging buzzer located on the car shall sound.
- D. If an obstruction of the doors should not activate the photo-electric door control device and prevent the doors from closing for more than a predetermined adjustable interval of 15 to 30 seconds, the doors shall reverse to the fully open position and remain open until the door close button re-establishes the closing cycle.

- E. Provide door "OPEN" and "CLOSE" buttons. When the door "OPEN" button is pressed and held, the doors shall remain open.

2.13 ELECTRIC INTERLOCKS

- A. Equip each hoistway door with true interlock, to prevent operation of car until all hoistway doors are locked in closed position.
- B. Hoistway door interlock shall meet the requirements of Rule 2.12.2.4 of ASME A17.1
- C. Equip car doors with electric contact which prevents operation of car until doors are closed as defined in ASME A17.1 unless car is operating in leveling zone or hoistway access switch is used. Locate door contact to prevent its being tampered with from inside of car. Car door contact shall not be accepted, unless it has successfully met requirements of Rule 2.12.4 of ASME A17.1.
- D. Wiring installed from the hoistway riser to each door interlock shall be NEC type SF-2, or equivalent.
- E. Provide devices which shall prevent operation of the elevator in event an accident to or defective door operator equipment has permitted an independent car or hoistway door panel to remain in the unclosed or unlocked position.

PART 3 - EXECUTION

3.1 PREPARATION

- A. Examine work of other trades on which the work of this section depends, report defects to Project Engineer in writing which may affect the work of this trade.

3.2 INSTALLATION

- A. Perform work with competent mechanics skilled in this work and under the direct supervision of the elevator contractors experienced foreman.
- B. Set hoistway entrances in alignment with car openings, and true with plumb sill lines.
- C. Install all equipment and accessories in accordance with manufacturer's instructions, applicable codes and standards.
- D. Erect hoistway sills, headers and frames prior to erection of doors. Erect fascias and toe guards.
- E. Grout sills and hoistway entrance frames.

3.3 CLEANING

- A. Prior to Final Acceptance, clean and polish surfaces with regard to type of material.

3.4 TESTS

- A. Car Leveling Test: Elevator car leveling devices shall be tested for accuracy of leveling at all floors with no load in car, balance load in

car and with contract load in car, in both directions of travel.

Accuracy of floor leveling, shall be within plus or minus 6 mm (1/8 inch) of level with the landing floor regardless of change in load.

B. Safety devices and Governor Tests: The safety devices and governor shall be tested as required by Rule 8.10 of ASME 17.1.

C. Limit Stops:

1. The position of the car when stopped by each of the normal limit stops with no load and with contract load in the car shall be accurately measured. The car shall reach the terminal landings under the above condition.

2. Final position of the elevator relative to the terminal landings shall be determined when the elevator has been stopped by the final limits. The lower limit stop shall be made with contract load in the elevator. Elevator shall be operated at contract speed for both tests. Normal limit stopping devices shall be inoperative for the tests.

D. Setting of Car Door Contacts: The position of the car door at which the elevator may be started shall be measured. The distance from full closure shall not exceed that required by ASME A17.1. The test shall be made with the hoistway doors closed or the hoistway door contact inoperative.

E. Setting of Interlocks: The position of the hoistway door at which the elevator may be started shall be measured and shall not exceed ASME A17.1 requirements.

F. Operating and Signal System: The elevator shall be operated by the operating devices provided and the operation signals and automatic floor leveling shall function in accordance with requirements specified. Starting, stopping and leveling shall be smooth and comfortable without appreciable steps of acceleration or deceleration.

G. Fire Service: Test new First Floor detection devices in conjunction with existing Fire Service to insure compliance with ASME A17.1.

H. If any equipment fails test requirements and a reinspection is required, the contractor shall be responsible for cost of reinspection, including salaries, transportation expenses, and other expenses.

- - - E N D - - -